T5040_Cov 03/17/2010

Istruzioni per l'uso . . . . . IT

SMT-T5040

SAMSUNG

SMT-T5040

Istruzioni per l'uso

IT

RICEVITORE TERRESTRE DIGITALE

ISTRUZIONI PER LA SICUREZZA

Questo dispositivo STB è stato realizzato in modo tale da soddisfare gli standard di sicurezza. Leggere attentamente le seguenti precauzioni relative alla sicurezza.

ALIMENTAZIONE DA RETE: AC 220-240V~, 50/60Hz

SOVRACCARICO: Non sovraccaricare le prese a muro, i cavi di prolunga o gli adattatori poiché ciò potrebbe causare incendi o scariche elettriche.

LIQUIDI: Tenere i liquidi lontani dall'STB. Non schizzare o sgocciolare liquidi sull'apparecchio e non porre su di esso degli oggetti contenenti liquidi, come ad esempio dei vasi.

PULIZIA: Prima di pulire l'STB, scollegarlo dalla presa a muro.
Utilizzare un panno leggermente inumidito con acqua (non utilizzare solventi) per pulire la parte esterna.

VENTILAZIONE: Non bloccare i fori di ventilazione dell'STB. Accertarsi che l'aria circoli liberamente attorno al dispositivo. Non posizionare mai l'STB in modo tale che sia esposto alla luce solare diretta o accanto ad apparecchi per riscaldamento, ad esempio un radiatore.
Non impilare mai altre apparecchiature elettroniche sull'STB.
Posizionare l'STB ad almeno 30 mm dalla parete.

ACCESSORI: Non utilizzare accessori che non siano raccomandati dal produttore per evitare situazioni pericolose o danni all'apparecchiatura.

CONNESSIONE AL SEGNALE TV VIA CAVO E AL TELEVISORE:
Collegare tutti i componenti prima di inserire qualsiasi tipo di cavo elettrico nella presa di corrente a muro. Spegnere sempre l'STB, il televisore e ogni altro componente acceso prima di collegare o scollegare qualsiasi tipo di cavo elettrico.

MANUTENZIONE: Non tentare di effettuare da soli operazioni di manutenzione del prodotto. Eventuali tentativi invalideranno la garanzia.
Per la manutenzione rivolgersi a personale qualificato.

TEMPESTE ELETTROMAGNETICHE:
Se l'STB è installato in un'area soggetta a un'intensa attività elettromagnetica, i dispositivi di protezione per il connettore di rete e la linea telefonica del modem dell'STB sono essenziali.
Durante le tempeste elettromagnetiche, è inoltre necessario attenersi alleistruzioni fornite dai singoli produttori delle apparecchiature collegate all'STB, come TV, Hi-Fi, ecc.

MESSA A TERRA: L'antenna terrestre DEVE ESSERE MESSA A TERRA. Il sistema di messa a terra deve essere conforme allo standard SABS 061.

AVVERTENZA!

1. Per non danneggiare il cavo di alimentazione o la spina attenersi alle seguenti indicazioni.
- Non modificare o usare in modo arbitrario il cavo di alimentazione o la spina.
- Non piegare o torcere eccessivamente il cavo di alimentazione.
- Scollegare il cavo di alimentazione afferrandolo per la spina.
- Tenere le apparecchiature che producono calore il più lontano possibile dal cavo di alimentazione, per evitare che il rivestimento si fonda.

2. La mancata osservanza di una delle seguenti indicazioni può provocare una scossa elettrica.
- Non aprire il corpo principale.
- Non inserire metalli od oggetti infiammabili all'interno del prodotto.
- Non toccare la spina del cavo di alimentazione con le mani bagnate.
- Scollegare il cavo di alimentazione in caso di temporale.
- Non coprire l'apertura di ventilazione del ricevitore con oggetti quali giornali, vestiti, ecc.
- Non collocare il ricevitore sopra apparecchiature domestiche che generano calore.

3. Non utilizzare il prodotto quando non funziona bene. Continuando a utilizzare il prodotto anche se è difettoso, può verificarsi un danno grave. Se il prodotto non funziona bene, rivolgersi al rivenditore locale.

4. La presa di rete viene utilizzata per scollegare l'apparecchio e deve e ssere facilmente accessibile in qualsiasi istante. Per staccare l'apparecchio dai main di avoirdupois, la spina deve essere estratta dallo zoccolo dei main, quindi la spina dei main sarà prontamente operabile.

DICHIARAZIONE DI CONFORMITA

Il presente apparato è conforme ai requisisti fissati dalla dirretiva 99/47/CE in materia di emissione di segnali televisivi. Recepita in Italia con Decreto Legislativo nr. 191 del 17 maggio 1999.
In particolare la suddeta apparecchiatura è conforme ai requisiti fissati dall comitato congiunto (JTC) UER/ETSI/CENELEC standard "DVB" Digital Video Broadcasting.

SOMMARIO

Istruzioni per la sicurezza **2**
Funzionalità generali **5**
Collegamento del STB **6**
Descrizione **8**
Pannello anteriore **8**
Pannello posteriore **9**
Telecomando 10
Funzioni di base 12
Funzionamento del ricevitore 14
Menu principale 14
1. Guida Canale 14
2. Prenota 14
2.1 Prenota 15
2.2 Programmi Prenotati 15
3. Servizi Pay per View 16
4. Impostazione 18
4.1 Canale 18
4.1.1 Aggiungi Favorito 18
4.1.2 Elimina Favorito 18
4.1.3 Blocca Canale 19
4.1.4 Cambia No. di Canale 19
4.1.5 Cancella Canale 19
4.2 Preferenza **20**
4.2.1 Protezione Minori 20
4.2.2 Durata Banner 20
4.2.3 Cambia Codice PIN 21
4.2.4 Modalitá Cambio Canali 21
4.2.5 Autoavvio Applicazioni MHP 21
4.2.6 Sottotitoli 22
4.2.7 Uso LCN 22
4.3 Sistema **23**
4.3.1 Impostazioni A/V 23
4.3.2 Impostazioni HDMI 23
4.3.3 Opzioni Lingua 24
4.3.4 Aggiornamento Canali 24
4.3.5 Aggiornamento Software 25
4.3.6 Ricerca Canale 25
4.3.7 Stato Del Sistema 26
4.3.8 Zona Oraria 26
4.3.9 Impostazione Del Modem 26
4.3.10 Impostazione Ethernet 27
4.3.11 Impostazioni Di Fabbrica 27
5. USB Servizi **28**
5.1 FOTO **28**
5.2 JUKE BOX **28**
Programmazione del Telecomando Unico **29**
Risoluzione dei problemi **37**
Smaltimento **37**
Specifiche tecniche **38**

FUNZIONALITÀ GENERALI

1. SEZIONE UTENTE

- 1000 CANALI PROGRAMMABILI
- GUIDA ELETTRONICA AVANZATA AI PROGRAMMI
- SUPPORTO MULTILINGUA PER OSD
- TELETEXT (VBI) SUPPORTATO CON PIÙ LINGUE
- TELECOMANDO A INFRAROSSI A FUNZIONALITÀ COMPLETA
- SCANSIONE AUTOMATICA E MANUALE
- ORGANIZZAZIONE DEI CANALI (PROGRAMMABILE)
- EPG CON AGGIORNAMENTO AUTOMATICO

2. SEZIONE SINTONIZZATORE

- SINTONIZZATORE A BANDA LARGA DA 161~862 MHz
- USCITA RF (46-862MHz)LOOP-THROUGH (MASCHIO)

3. SEZIONE VIDEO

- DVB-T COMPLIANT
- VIDEO MPEG-2 (MP@ML), H.264
- 1~15 Mb/s DATA RATE
- SUPPORTA PROPORZIONI 4:3 (NORMALE) E 16:9 (WIDE SCREEN)
- FFT: 2K O 8K
- 1 SCART, 1 HDMI

4. SEZIONE AUDIO

- MPEG 1 AUDIO LAYER I & II, AAC+, Dolby Digital & Dolby Digital +
- AUDIO MONO, DUAL, STEREO E JOINT STEREO
- FREQUENZE DI CAMPIONAMENTO 32, 44,1 E 48 KHz
- CONTROLLO DEL VOLUME E FUNZIONE DI DISATTIVAZIONE AUDIO DA TELECOMANDO
- USCITA AUDIO DIGITALE SPDIF AND HDMI

COLLEGAMENTO DEL STB

1. POSIZIONAMENTO DEL RICEVITORE(Schema di collegamento)

Il RICEVITORE deve essere posizionato in un ambiente adeguatamente ventilato.

Non posizionarlo in un armadietto completamente chiuso per non bloccare il flusso dell'aria ed evitare surriscaldamenti.

Il dispositivo deve essere protetto dalla luce diretta del sole, dall'eccessiva umidità, da manipolazioni improprie e dagli animali domestici.

Evitare di impilare altri componenti elettronici sul ricevitore.

Il dispositivo deve essere posizionato in modo tale che l'accesso per il cavo dell'antenna sia sicuro.

2. COLLEGAMENTO DEL RICEVITORE ALLE ANTENNE

È possibile collegare il ricevitore ai seguenti tipi di antenna:

- Utilizzare un'antenna da tetto standard per la ricezione di canali tra VHF e UHF.
- Poiché molte antenne da tetto meno recenti possono ricevere solo un numero limitato di canali, è difficile o impossibile ricevere i canali digitali trasmessi sulle frequenze piùalte. In questo caso, è possibile sostituire l'antenna.
- Alcune antenne esterne sono dirette verso un trasmettitore TV analogico. In questo caso, l'antenna va diretta verso un trasmettitore TV digitale.
- Non è consigliabile utilizzare antenne interne o montate alle finestre, poiché sarebbe difficile o impossibile ricevere i canali digitali.

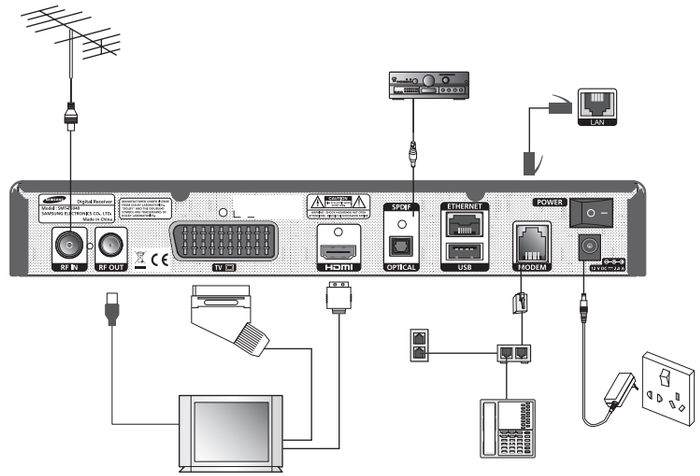
3. COLLEGAMENTO DEL RICEVITORE AL TELEVISORE

Per collegare il ricevitore al televisore è possibile utilizzare un cavo SCART o un cavo HDMI. Nel primo caso, collegare il connettore SCART contrassegnato con TV alla relativa presa SCART sul televisore; altrimenti collegare il connettore HDMI alla porta HDMI del televisore.

4. COLLEGAMENTO DEL SISTEMA AUDIO DIGITALE

Collegare con un cavo in fibra ottica la presa SPDIF sul ricevitore con la presa OPTICAL sul sistema audio digitale.

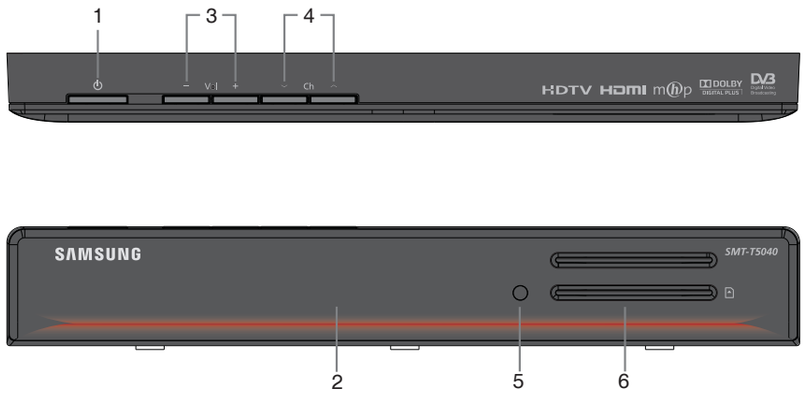
Schema di collegamento



Nota **: In alcune aree, il segnale terrestre digitale potrebbe essere debole. Per ricevere questi segnali, è consigliabile utilizzare un'antenna con potenziatore del segnale incorporato.**

DESCRIZIONE

Pannello anteriore



1. ⏻/I Questo tasto serve per accendere e spegnere il ricevitore (Standby).

2. LED& Display Questo indicatore si accende quando l'unità viene acceso and display on.

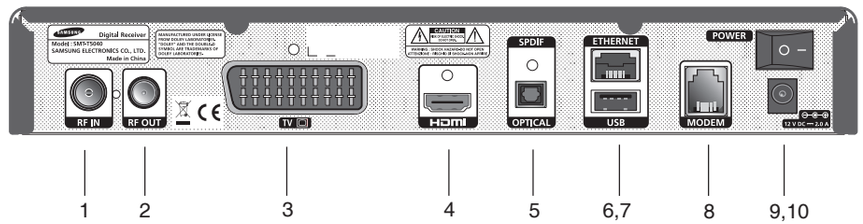
3. Vol+ / Vol- Questi tasti servono per cambiare il volume.

4. CH+ / CH- Questi tasti servono per cambiare canale.

5. Sensore a infrarossi Consente di ricevere i comandi a infrarossi del telecomando.

6. Card Slot Slot per smartcard.

Pannello posteriore



1. RF IN Serve per collegare un'antenna terrestre.

2. RF OUT Il ricevitore fornisce la connessione RF analogica passante. Questo permette il collegamento di un secondo ricevitore analogico.

3. TV Serve per il collegamento alla TV.

4. HDMI Serve per il collegamento alla presa HDMI della TV.

5. SPDIF Uscita per il collegamento a un amplificatore digitale.

6. USB Serve per il collegamento ad un dispositivo di memoria USB.

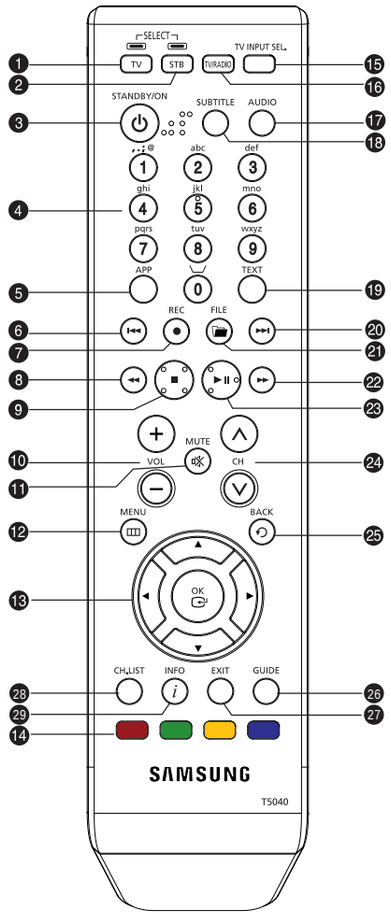
7. ETHERNET Serve per il collegamento ad una rete LAN.

8. MODEM Il modem è un terminale che condivide una linea con un apparecchio telefonico utilizzando uno sdoppiatore.
Viene utilizzato per la PPV e per il trasferimento di informazioni relative alla sottoscrizione.

9. DC POWER Serve per collegare l'alimentatore esterno DC 12V / 2A.

10. POWER SWITCH Serve per l'accensione / spegnimento del ricevitore.

Telecomando



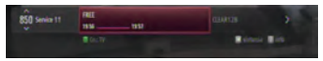
Nota : Quando si inseriscono le batterie, verificare che la polarità (+/-) sia corretta.

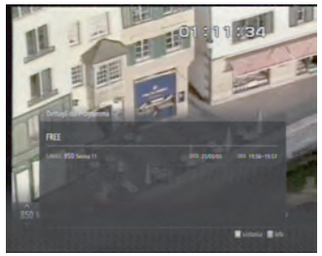
1. TV	Consente di selezionare il TV.
2. STB	Consente di selezionare il STB.
3. STANDBY/ON	Consente di mettere il STB in modalità stand-by (nessun segnale verso il televisore). Il pulsante è di colore grigio.
4. 0-9 Numeric key	Questi tasti servono per immettere i valori numerici e per selezionare il canale inserendone direttamente il numero.
5. APP	È il tasto che consente di accedere al gestore dell'applicazione.
6. ⏮	Questo tasto viene utilizzato per riprodurre file multimediali precedenti a quello in riproduzione.
7. REC(●)	Questo tasto viene utilizzato per eseguire la funzione di registrazione.
8. ◂◂	Questo tasto viene utilizzato per eseguire il riavvolgimento durante la riproduzione di un file multimediale.
9. ■	Questo tasto è utilizzato per interrompere la riproduzione di un file multimediale.
10. VOL+/VOL-	Questi tasti servono per alzare o abbassare il volume.
11. MUTE(🔇)	Questo tasto serve per attivare la funzionalità "muto".
12. MENU	Questo tasto serve per aprire il menu o per tornare al menu precedente.
13. Tasto freccia (▲▼◄►) OK	Sposta la barra di evidenziazione dell'applicazione MHP. Questo tasto serve per inserire i dati del ricevitore nel sistema di menu e confermarli.
14. Tasti colore (ROSSO, VERDE, GIALLO, BLU)	Questi tasti vengono utilizzati per selezionare funzioni speciali per il STB.
15. TV INPUT SEL.	Seleziona l'ingresso video del TV.
16. TV/RADIO	Passa dai canali TV a quelli Radio.
17. AUDIO	Consente di selezionare le tracce audio messe a disposizione dal servizio corrente.
18. SUBTITLE	Questo tasto viene usato per selezionare la modalità sottotitoli.
19. TEXT	Questo tasto serve per selezionare la modalità televideo.
20. ⏭	Questo tasto viene utilizzato per riprodurre file multimediali successivi a quello in riproduzione.
21. FILE(🗀)	Questo tasto viene utilizzato per esplorare cartelle del dispositivo di archiviazione esterno.
22. ▸▸	Questo tastoviene utilizzato per eseguire l'avanzamento rapido durante la riproduzione di un file multimediale.
23. ⏯	Questo tasto viene utilizzato per eseguire o mettere in pausa la riproduzione di file multimediali.
24. CH+/CH-	Questi tasti servono per cambiare canale.
25. BACK	Questo tasti è usato per ritornare al menu precedente.
26. GUIDE	Questo tasto abilita l'Electronic Program Guide (Guida elettronica ai programmi), che visualizza la guida ai programmi TV/Radio.
27. EXIT	Questo tasto permette l'uscita da un menu OSD.
28. CH.LIST	Questo tasto permette di visualizzare l'elenco di servizi.
29. INFO	Questo tasto permette di visualizzare informazioni relative al canale.

FUNZIONI DI BASE

1. Schermo

Prima di visualizzare i programmi televisivi, è necessario eseguire l'installazione.
In un primo tempo sarà infatti possibile vedere solo le immagini dei menu.
Una volta programmati i canali televisivi, l'immagine che segue (banner) apparirà ogni volta che si cambia canale:





Con la prima pressione del tasto apparirà il banner descritto sopra.
Dopo aver premuto il tasto i (info) una seconda volta, si otterranno informazioni dettagliate sul programma che si sta visualizzando e, se le informazioni sono numerose, verranno visualizzate in un altro riquadro. Quando le informazioni sono costituite da più pagine, il tasto ▲/▼ può essere utilizzato per sfogliare le pagine su è giù.

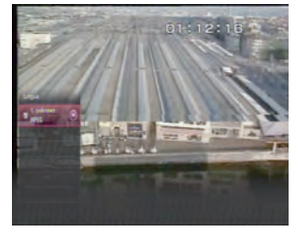
Nota : questo servizio dipende dal provider.

2. Regolazione del volume

Per regolare il livello del volume:

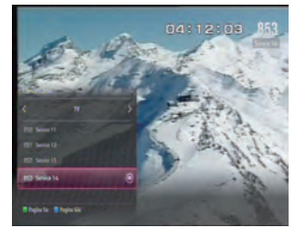
- Premere i tasti **VOL+** o **VOL-** per regolare il livello del volume.
- Premere il tasto **MUTE** per disattivare l'audio.
- Premere nuovamente il tasto **MUTE** o i tasti **VOL+** o **VOL-** per annullare la disattivazione dell'audio.

3. Selezione informazioni audio



- Premere il tasto **AUDIO** per visualizzare l'elenco delle piste audio disponibili.
- Premere i tasti ▲/▼ e **OK** per effettuare una selezione.

4. Elenco servizi



- Premere il tasto **CH.LIST** mentre si sta visualizzando un programma.
- Selezionare l'elenco canali TV o canali Radio premendo ◄/►.
- Selezionare il canale premendo ▲/▼ e premere I tasti colore **Verde / Blu** per passare alle pagine precedenti e successive dell'elenco.
- Premere il tasto **OK** per visualizzare il canale selezionato.

5. EPG

EPG - Guida elettronica avanzata ai programmi

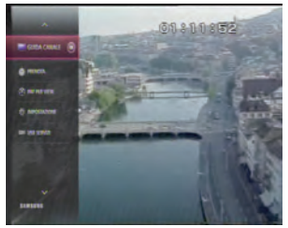
La guida elettronica al programma fornisce per tutti i canali le informazioni sul programma scelto.

Note : 1. Questo servizio dipende dal provider.
2. Dopo avere riconosciuto il GMT dal segnale, operazione che richiede alcuni secondi, il ricevitore è in grado di visualizzare le informazioni corrette sui programmi.

- Premere il tasto **GUIDE** mentre si sta visualizzando un programma.
- Tasto **ROSSO** : Il tasto rosso consente di passare alla data precedente.
- Tasto **VERDE** : Il tasto verde consente di passare alla data successiva.
- Tasto *i* : Questo tasto consente di visualizzare le informazioni sul programma, se non sono tutte elencate nella stessa pagina. Utilizzare i tasti ▲/▼ per passare alle pagine precedenti e successive.
- Tasto ◄/► : Visualizza l'elenco dei programmi in blocchi da 30 minuti.
- Selezionare il canale premendo i tasti ▲/▼ e premere il tasto **OK** per visualizzare il canale selezionato.

FUNZIONAMENTO DEL RICEVITORE

Menu principale



Dopo avere installato il sistema dell'antenna e il STB con i connettori appropriati:

- collegare il cavo di alimentazione alla rete elettrica e accendere il ricevitore;
- Premere il tasto **MENU** per visualizzare il menu principale.

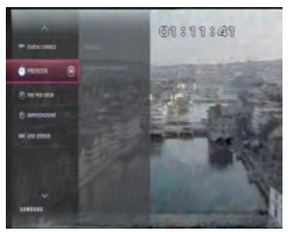
Verrà visualizzata la seguente schermata:

Le voci del sottomenu visualizzate sono: **Guida Canale, Prenota, Servizi Pay per View, Impostazioni,** e **Servizi USB**.

1. Premere la voce **Guida Canale** del menu principale.

La guida elettronica al programma fornisce per tutti i canali le informazioni sul programma scelto.

Nota : 1. Questo servizio dipende dal provider.
2. Dopo aver riconosciuto il fuso orario dal segnale, operazione che richiede alcuni secondi, il ricevitore è in grado di visualizzare le informazioni corrette sui programmi.



2. Premere la voce **Prenota** del menu principale.

Il menu Prenota sarà visualizzato: Prenota, Programmi Prenotati.

2.1 Prenota

Se si desidera impostare ad avvio automatico o eliminare il canale riservato, si prega di seguire le istruzioni qui sotto.

- Selezionate Ripeti premendo il ◄/► (Once, Daily, lun, mar, mer, gio, ven, sab, dom)
- Premere il tasto per mostrare tutti i canali, selezionare il canale premendo i tasti ▲/▼ .
- Inserire l'Ora di Inizio e l'Ora di Fine premendo i tasti numerici.
- Selezionare **Prenota** e premere il tasto **OK** per confermare.

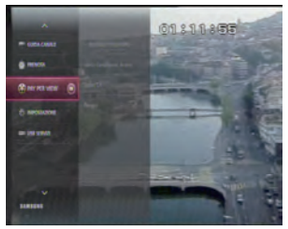
2.2 Programma Prenotati

Se si desidera impostare l'auto avvio o eliminare il canale prenotato, si prega di seguire le istruzioni seguenti.

- Selezionare il canale premendo il tasto ▲/▼.
- Premere il tasto **OK** per cancellare il canale prenotato.
- Premere il tasto **giallo** per impostare l'avvio automatico del canale prenotato.
- Premere i tasti ▲/▼ per cambiare le voci di menu, i tasti ◄/► e quelli numerici per modificare le opzioni, quindi selezionare **Prenota** e premere il tasto **OK** per confermare.

3. Premere la voce “**Servizi Pay per View**” dal menu principale

Verrà visualizzato il menu dei servizi Pay Per View: (Mediaset Premium, Dahlia Conax e Pangea).



3.1 Mediaset Premium

L’opzione Mediaset Premium fornisce le informazioni sui servizi disponibili sulla smart card Mediaset. Quando la scheda è inserita, il numero di serie, l'accreditamento corrente e le informazioni della ricarica sono visualizzati sul menu; per riferimento è anche disponibile l’elenco delle altre offerte speciali.

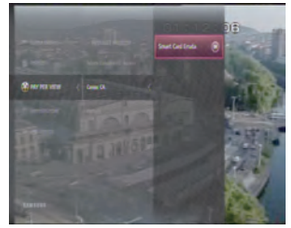
3.2 Irdeto Conditional Access (DAHLIA)

L’opzione “Irdeto Conditional Access” fornisce le informazioni sui servizi della smart card DAHLIA. Quando la scheda è inserita può controllare la versione corrente del sistema Irdeto e ricevere i messaggi dall'operatore Dahlia stesso.

3.3 Conax Conditional Access

L’opzione “Conax Condinatial Access” fornisce le informazioni sui servizi della smart card Conax. Quando la scheda è inserita, può gestire l'abbonamento e le liste degli eventi, il credito corrente disponibile, il numero di serie e la versione Conax corrente.

E’ possibile cambiare il numero PIN della smart card ed il livello della valutazione dei programmi.

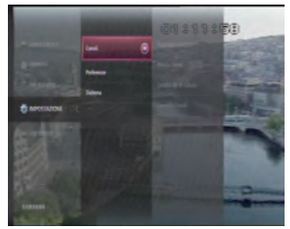


3.4 Pangea

L’opzione Pangea fornisce le informazioni sui servizi della smart card dei Broadcaster che fanno parte della piattaforma Pangea. Quando la scheda è inserita vengono visualizzati il numero di serie, il credito residuo e le informazioni sulla ricarica; eventualmente è anche disponibile l’elenco delle altre offerte speciali.

4. Selezionare la voce **Impostazioni** dal menu principale.

Verranno visualizzati i sottomenu **Canali**, **Preferenze** e **Sistema**.



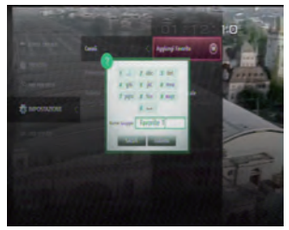
4.1 Premere la voce "**Canali**" dal menu principale

Verranno visualizzati i menu **Aggiungi Gruppo Preferiti, Elimina Preferito, Blocca i Canali, Cambia Num. Canali, Cancella i Canali**.

4.1.1 Aggiungi Gruppo Preferiti

Se si desidera aggiungere un canale ad un Gruppo di Preferiti, seguire le seguenti istruzioni.

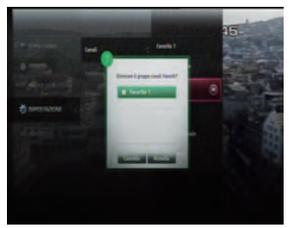
- Inserire il nome del gruppo premendo i tasti numerici, selezionare **SALVA** e premere il tasto **OK** per confermare.
- Premere il tasto **OK** per aggiungere un canale nella lista di canali preferiti.
- Selezionare **Salva** e premere il tasto **OK** per confermare.



4.1.2 Eliminare un canale Preferito

Se si desidera eliminare un canale dal gruppo dei preferiti, si prega di seguire le istruzioni di seguito elencate.

- Premere i tasti ▲/▼ e il tasto **OK** per selezionare dalla lista dei preferiti.
- Selezionare **Elimina** e premere il tasto **OK** per confermare.



4.1.3 Blocca Canale

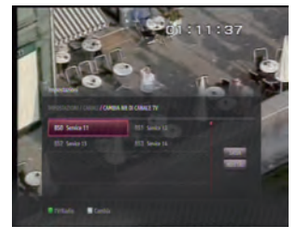
- Inserire il codice PIN e selezionare il tasto **OK**. Se non è stato modificato, il codice PIN di fabbrica è **0000**.
- Selezionare il canale premendo il tasto ▲/▼/◄/►.
- Selezionare il canale da bloccare premendo il tasto **OK**.
- Selezionare **Salva** e premere il tasto **OK** per confermare l'operazione.

Ogni volta che è necessario visualizzare il canale bloccato, sarà necessario inserire il codice PIN nella finestra di richiesta. Per annullare il blocco:

- Inserire il codice PIN e selezionare il tasto **OK**. Se non è stato modificato, il codice PIN di fabbrica è **0000**.
- Scegliere il o i canali da sbloccare premendo il tasto **OK**, poi selezionare il tasto **Salva** e premere il tasto **OK** per annullare il blocco.

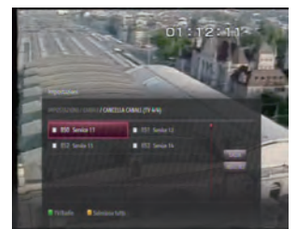
4.1.4 Cambia Num. Canali

Se si desidera modificare il numero del canale, si prega di seguire le istruzioni seguenti.



- Selezionare il canale premendo il tasto ▲/▼/◄/►.
- Premere il tasto **OK** per cambiare il numero di canale.
- Cancella il vecchio numero del canale premendo il tasto ◄.
- Immettere il nuovo numero del canale premendo i tasti numerici.
- Premere il tasto **OK** per confermare.
- Premere il tasto **verde** per cambiare canale TV o canale Radio.

4.1.5 Cancella Canale



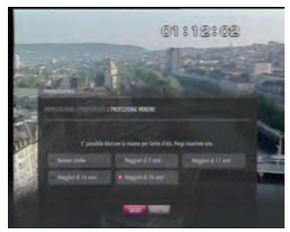
- Selezionare il canale che si desidera eliminare, premendo il tasto **OK**.
- Premere il tasto **giallo** per selezionare e poi eliminare tutti i canali, premendo il tasto **OK**.
- Selezionare **Salva** e Premere il tasto **OK** per confermare l'operazione.

4.2 Premere la voce **Preferenza** del menu principale.

Verranno visualizzati i sottomenu **Protezione Minori, Durata Banner, Cambia codice PIN, Modalità cambio canale, Avvio Automatico applicazioni MHP, Sottotitoli** e **Funzione LCN**.

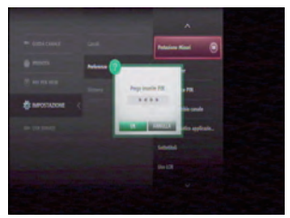
4.2.1 Protezione Minori

Il Controllo Parentale protegge i vostri figli da contenuti per adulti, selezionare la prima opzione dal menu **Preferenza**: "**Protezione Minori**".



- Usa il tasto ▲/▼/◄/► per selezionare l'età del bambino più piccolo, quindi premere il tasto OK per salvare questa impostazione.
- Tutti i servizi che appartengono a classi di età pari o superiore a quella impostata saranno bloccati e verrà richiesto di inserire il codice PIN.
- Se si desidera disattivare il controllo parentale: selezionare "No Control".
- L'impostazione predefinita è: attivazione "On" ed età limite "18 anni".

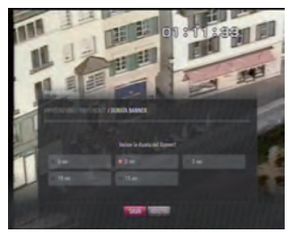
Si prega di inserire il codice PIN.



- Questo banner viene visualizzato se il servizio visualizzato appartiene ad una classe di età maggiore rispetto a quella prevista nel menu di controllo parentale. Inserisci il codice PIN a quattro cifre per nascondere questo banner e visualizzare il contenuto del servizio. Il codice PIN di fabbrica è 0000 e si può cambiare dal menu Cambia Codice PIN.

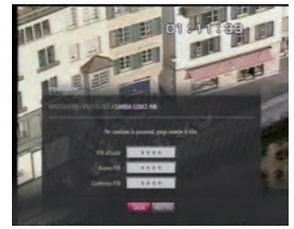
4.2.2 Durata Banner

È possibile impostare il tempo di visualizzazione del banner, selezionare la seconda opzione dal menu **Preferenze**: "**Durata Banner**".



- Impostare la durata di visualizzazione delbanner sulla finestra visualizzata sullo schermo. Il tempo varia da 0 a 15 secondi.
- Seleziona **Salva** e premere il tasto **OK** per confermare l'operazione.

4.2.3 Cambia Codice PIN



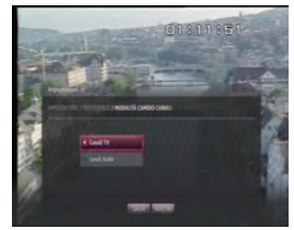
Per modificare il codice PIN, selezionare la terza opzione dal menu **Preferenza**: "**Cambia Codice PIN**".

In questa finestra è necessario immettere il codice PIN corrente nel primo campo ed il nuovo codice nel secondo campo. Per confermare, è necessario ripetere il nuovo codice PIN. Si ricorda che il codice PIN deve essere un valore numerico di 4 cifre.

CODICE PIN PREDEFINITO DI FABBRICA: 0 0 0 0.

Nota: Nel caso in cui si dimenticasse il codice PIN, contat tare il proprio rivenditore o il servizio di assistenza. Una volta che si cambia la password, si raccomanda di conservarla in un luogo sicuro.

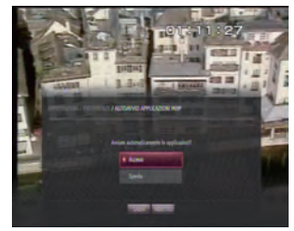
4.2.4 Modalità cambio canale



Se si desidera cambiare la modalità di visualizzazione del canale, si prega di seguire le seguenti istruzioni.

- Selezionare **tutti i programmi televisivi** o tutti i canali **Radio** o gruppo **Preferiti** con il tasto ▲/▼.
- Selezionare **Salva** e premere **OK**'per salvare la nuova impostazione nell'opzione **Modalità cambio canale**.

4.2.5 Avvio Automatico applicazioni MHP

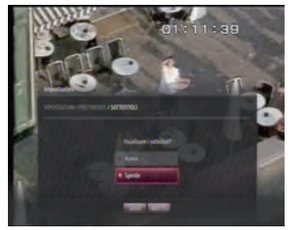


Se si desidera cambiare la modalità di visualizzazione delle applicazioni MHP, si prega di seguire le seguenti istruzioni.

- Selezionare **Sì** o **No**, nel menu **Avvio Automatico applicazioni MHP** con il tasto ▲/▼.
- Selezionare **Salva** e Premere **OK** per salvare l'impostazione selezionata.

Nota: l'uscita dal menu senza confermare con il tasto **OK** lascia invariata l'impostazione del menu **Avvio Automatico applicazioni MHP**.

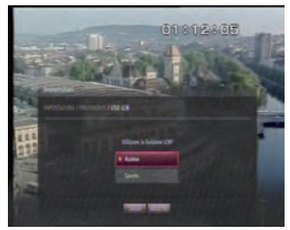
4.2.6 Sottotitoli



Se si desidera cambiare la modalità di visualizzazione dei sottotitoli, si prega di seguire le seguenti istruzioni.

- Selezionare **ON** o **OFF** nel menu **Sottotitoli** con il tasto ▲/▼.
- Selezionare **Salva** e premere **OK** per salvare l'impostazione.

4.2.7 Funzione LCN



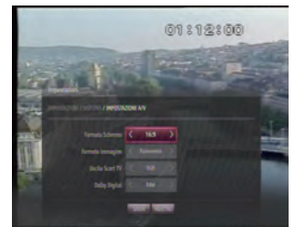
Se si desidera utilizzare la Funzione LCN, si prega di seguire le seguenti istruzioni.

- Selezionare **Sì** o **No** in Uso LCN con il tasto ▲/▼.
- Selezionare **Salva** e premere **OK** per salvare l'impostazione in **Funzione LCN**.

4.3 Premere la voce **Sistema** dal menu principale.

Verranno visualizzati i sottomenu **Impostazione A/V, Impostazioni HDMI, Opzione Lingua, Aggiornamento Canali, Aggiornamento Software, Ricerca Canali, Stato Del Sistema, Zona Oraria, Impostazione Modem, Impostazione Ethernet** e **Impostazioni Di Fabbrica**

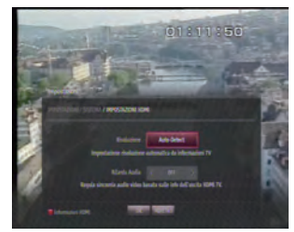
4.3.1 Impostazioni A/V



È possibile modificare le Impostazioni A/V selezionando l'opzione dal menu Sistema e premendo il tasto **OK**.

- Premere i tasti ▲/▼ per selezionare l'opzione desiderata e i tasti ◄/► per cambiare l'opzione.
- Selezionare **Salva** e premere **OK** per salvare l'impostazione in **Funzione LCN**.
- Premere il tasto **MENU / EXIT** per uscire dal menu.
- Selezionare il Formato Schermo in base al televisore: rapporto Full Screen **4: 3** o il rapporto Standard **16: 9**.
- Selezionare il formato di visualizzazione: **Schermo Intero** o **Letter Box**, quando il formato schermo è 4:3.
- Selezionare il formato di visualizzazione: **Standard** o **Panoramico**, quando il formato schermo è 16:9.
- Selezionare il Tipo di uscita TV SCART: **RGB** o **CVBS**.
- Selezionare il Dolby Digital Type : **Dolby D** o **RAW** o **PCM**.

4.3.2 Impostazioni HDMI



È possibile modificare le **impostazioni HDMI** selezionando l'opzione Impostazioni HDMI dal menu Sistema premendo il tasto **OK**.

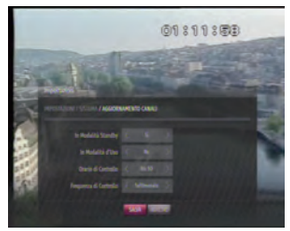
- Premere i tasti ▲/▼ per selezionare l'opzione desiderata e i tasti ◄/► per cambiare l'opzione.
- Selezionare **OK** e premere il tasto **OK** per confermare.
- Premere il tasto **MENU / EXIT** per uscire dal menu.
- **Selezionare Ritardo Audio: OFF** o **ON**.

4.3.3 Opzioni Lingua

Il menu **Opzioni lingua** consente all'utente di selezionare la lingua desiderata del menu, dell'audio primario e dei sottotitoli.

- Per venire incontro alle esigenze di utenti che parlano diverse lingue, il menu è disponibile in 5 linguaggi diversi: **Italiano**, **Tedesco**, **Spagnolo**, **Francese** ed **Inglese**.
- Selezionare la lingua desiderata premendo il tasto ◄/►, poi selezionare **Salva** e premere il tasto **OK**.

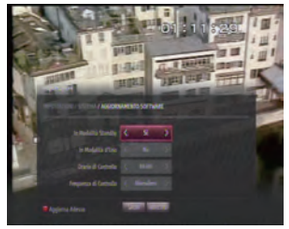
4.3.4 Aggiornamento Lista Canali



È possibile aggiornare la lista dei canali del ricevitore sintonizzandosi su di un canale specifico predisposto dall'emittente, selezionando l'opzione **Aggiornamento Lista Canali** dal menu **Sistema** e premendo il tasto **OK**.

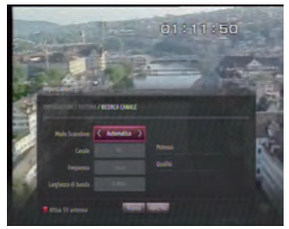
- Premere il tasto ▲/▼ per selezionare l'opzione desiderata ed il tasto ◄/► per cambiare l'opzione.
- Selezionare **OK** e premere il tasto **OK** sul telecomando per confermare.
- Premere il tasto **MENU / EXIT** per uscire dal menu.
- Selezionare **In modalità Standby**: **Si** o **No**. Questa opzione permette l'aggiornamento automatico della lista dei canali quando il decoder è in modalità standy.
- Selezionare la **Modalità Operativa**: **Si** o **No**. Questa opzione permette l'aggiornamento automatico della lista dei canali quando il decoder è in modalità in funzione.
- Selezionare il **Controllo Orario** premendo I tasti ◄/►. Questo campo permette di specificare l'orario in cui il decoder provvederà a verificare la disponibilità di un aggiornamento della lsita canali.
- Selezionare la **Frequenza di Verifica**: **Ogni settimana** o **Ogni giorno**. Questa opzione consente di specificare la frequenza con cui il decoder dovrà verificare la presenza di un aggiornamento della lista canali.

4.3.5 Aggiornamento Software



È possibile scaricare e aggiornare il software di sistema del ricevitore attraverso un canale specifico predisposto dall'emittente. Il download può richiedere parecchi minuti, pertanto si rammenta di non spegnere il ricevitore durante questa operazione. Le opzioni sono molto simili a quelle descritte nel paragrafo precedente, in merito all'**Aggiornamento Lista Canali**. Infine, premendo il **TASTO ROSSO** del telecomando è possibile provvedere ad un aggiornamento forzato del software di sistema del ricevitore.

4.3.6 Ricerca Canale



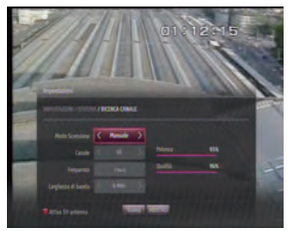
L'opzione **Ricerca Canale** permette di ricercare i canali manualmente o in maniera automatica.

Ricerca canali automatica

La ricerca automatica dei canali si imposta selezionando l'opzione **Automatica** per il campo **Modalità scansione**, utilizzando il tasto ◄/►.

Selezionando **Ricerca** e premendo il tasto **OK** del telecomando, i canali verranno automaticamente scaricati nella lista dei canali.

Ricerca canali manuale

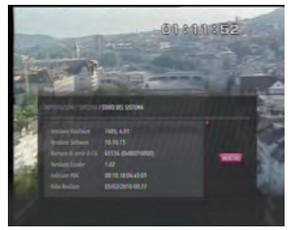


La ricerca manuale dei canali si imposta selezionando l'opzione **Manuale** per il campo **Modalità Scansione**, utilizzando il tasto ◄/►.

Selezionare il numero di **Canale**. È possibile selezionare il canale specifico che si desidera trovare.

- Inserire la **Frequenza** del canale da ricercare.
- Selezionare la **banda Larghezza di banda**. È possibile selezionare il valore di 7 o 8 MHz.
- Selezionare **Ricerca** e premere il tasto **OK** per avviare il processo di scansione.

4.3.7 Stato Del Sistema



Questo menu mette a disposizione informazioni che possono essere richieste da un centro assistenza o dal fornitore di servizi. Per cui, posizionare il cursore sull'opzione Stato Del Sistema e premere il tasto OK. Sarà visualizzata la seguente schermata.

Premere il tasto ▲/▼ per scorrere in alto e in basso la stessa schermata.

4.3.8 Fuso Orario

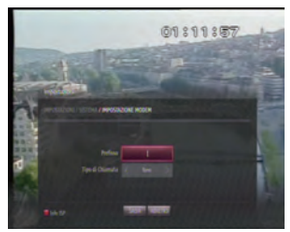
L'opzione **Fuso Orario** consente all'utente di selezionare il fuso orario locale.

- Premere i tasti ◄/► per cambiare l'ora locale nel **Fuso Orario**. L'ora locale verrà modificata in base alla vostra posizione.

Il Fuso Orario fa riferimento all'ora standard di Greenwich. Questa impostazione non può essere modificata.

- Premere i tasti ◄/► per abilitare (**ON**) o disabilitare (**OFF**) l'opzione **Ora legale**.

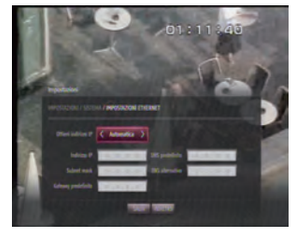
4.3.9 Impostazioni Modem



Per impostare il modem, si prega di seguire le seguentu istruzioni.

- Premere i tasti ▲/▼ per selezionare l'opzione da modificare.
- Immettere il **Prefisso linea esterna** premendo i tasti numerici, solo nel caso in cui sia necessario un codice di accesso alla linea telefonica esterna
- Premere il tasto ◄/► per selezionare il **Tipo di chiamata**: a **Toni** o ad **Impulsi**.
- Selezionare **Salva** e premere il tasto **OK** per confermare.
- Premere il tasto **rosso** per visualizzare le impostazioni dell'Internet Server Provider: **Numero POP**, **Nome Utente**, **Password** e il **Server DNS**.
- Selezionare l'opzione da modificare con il tasto ▲/▼ ed inserire i relativi dati con i tasti numerici.
- Premere il tasto **verde** per testare la connettività del modem.
- Selezionare **Salva** e premere il tasto **OK** per confermare.

4.3.10 Impostazione Ethernet



Per le impostazioni Ethernet, si prega di seguire le seguenti istruzioni.

- Premere il tasto ▲/▼ per selezionare l'opzione desiderata e premere il tasto ◄/► per cambiare l'opzione.
- Seleziona **Acquisizione infitizzo IP**: **Automatico** o **Manuale**.

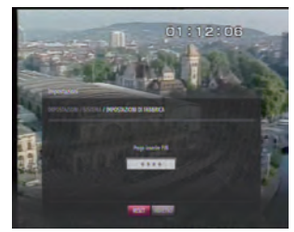
Modalità Automatica:

- Selezionare **Salva** e premere il tasto **OK** per confermare.

Modalità Manuale:

- Premere I tasti numerici per inserire l'**indirizzo IP**, la **Subnet Mask**, il **Gateway predefinito** e i **DNS primario** e **secondario**. Premere i tasti numerici per inserire i valori nei campi appena elencati. Selezionare **Salva** e premere il tasto **OK** per confermare.

4.3.11 Impostazioni Di Fabbrica



Il menu **Impostazioni di Fabbrica** permette di ripristinare le impostazioni di default nel caso in cui l'utente incontri alcuni problemi dopo aver cambiato i valori dei canali o altri dati che potrebbero introdurre ad errori. Inserire nella finestra di richiesta il codice PIN standard 0000 e premere il tasto **OK**; premere una seconda volta il tasto **OK** per confermare ed il ricevitore ripristinerà le impostazioni predefinite in maniera automatica.

Nota: questa operazione causa la cancellazione di tutte le tue impostazioni effettuate precedentemente!

5. Selezionare la voce **USB Servizi** dal menu principale.

Il menu USB Servizi sarà visualizzato: **FOTO**, **JUKE BOX.**

5.1 Selezionare la voce Foto dal menu USB Servizi.

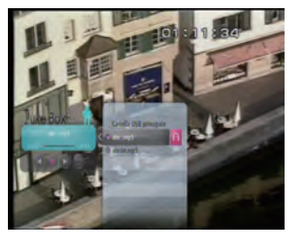
Il lettore delle foto sarà visualizzato.

- Premere il tasto ▲/▼ per spostarsi tra i file di immagine per vedere le schermate.
- Premere il tasto **OK** per selezionare.
- Premere il tasto **MENU / EXIT** per uscire dal menu.
- Selezionare l'icona e premere il tasto **OK** per passare alla visualizzazione di foto.
- Premere i tasti ◄/► per spostarsi tra i file di immagine per vedere altre foto.

5.2 Premere la voce **Juke Box** dal menu principale.

Il browser di file audio sarà visualizzato.

- Premere i tasti ▲/▼ per spostarsi tra i file audio.
- Premere il tasto **OK** per selezionare.
- Premere il tasto **MENU / EXIT** per uscire dal menu.
- Selezionare l'icona e premere il tasto **OK** per avviare la riproduzione.



PROGRAMMAZIONE DEL TELECOMANDO UNICO

1. Tenere premuto il tasto TV del telecomando fornito col decoder e contemporaneamente digitare il codice a 3 cifre relativo al marchio di Televisore da programmare
2. I tasti funzione TV disponibili sono: **TV STANDBY/ON, NUMERICI(0~9), CH+/-, VOL+/-, INPUT SEL.** e **MUTE**.

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
SAMSUNG	001 002 003 004 005 006 007 008 009 010 050 066 076 102 195 217 365 379 421
A.R. SYSTEMS	049 152
ACCENT	049 152
ACEC	112
ACURA	195
ADMIRAL	065 076 163 171 190 307 324 369 466 481
ADYSON	379
AGASHI	076 379
AGEF	324
AIKO	049 076 102 141 152 172 195 225 379
AIWA	377 459
AKAI	049 050 055 066 076 102 107 123 139 141 150 152 172 182 195 209 225 379 428 433 437 471 475
AKIBA	049 123 152 380 378
AKITO	049 106 152
AKURA	049 076 123 195 378 426 470
ALARON	042 379
ALBA	018 049 050 107 123 134 163 168 195 225 232 379 413 421 457
ALBIRAL	371
ALCYON	407
ALLORGAN	050 094 236 379
ALLSTAR	049 152
AMPLIVISION	113 379 421 425
AMSTRAD	012 049 076 123 131 152 172 195 225 426 476
ANAM	049 152 195
ANAM NATIONAL	049 152
ANGLO	076 195
ANITECH	049 076 152 195 407
ANSONIC	045 049 107 112 152 195 210 226 391 413 421
ARC EN CIEL	074 182 186 424 453 463
ARCAM	379 424
ARISTONA	049 050 065 079 112 152 160
ARTHUR MARTIN	107 127 136 139 153 307 425
ASA	020 065 078 080 091 146 171 197 307 324 375 408 449
ASBERG	049 152 407
ASORA	195
ASTRA	195
ASUKA	050 076 123 378 379
ATLANTIC	049 050 071 113 152 236 379
ATORI	195

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
AUCHAN	107 425
AUDIOSONIC	049 074 076 152 182 195 213 379 421
AUDIOTON	050 076 379 421
AUSIND	090 407
AUTOVOX	050 071 078 079 080 083 090 156 236 324 379 407 413 449 468 470
AWA	018 049 131 152 195 226 320 379 426 433
AYOMI	411
BAIRD	074 102 182 209 218 379 409
BANG & OLUFSEN	324 483
BARCO	107 371 480
BASIC LINE	049 107 123 195 226 378
BASTIDE	379
BAUR	049 107 150 152 172 247 249 357 414 454 470 475
BEKO	152 241 421 433 460
BEON	049 152 163
BEST	213 421
BESTAR	049 152 226 421
BINATONE	379
BLACK STAR	413
BLACKTRON	378
BLACKWAY	378
BLAUPUNKT	057 060 113 247 249 345 451 454 481
BLUE SKY	049 123 152 195 217 232 378 380 457
BLUE STAR	378
BONDSTEC	413
BOOTS	050 106 379
BPL	049 152 378
BRANDT	014 074 182 186 218 424 436 452 462
BRANDT ELECTRONIC	074 453 463
BRANDT ELECTRONIQUE	074 182 186 453
BRINKMANN	049 152 163
BRIONVEGA	049 065 083 152 167 172 324 356 476
BRITANNIA	379
BROTHER	076
BRUNS	065 324
BSR	094 107 110 139 168
BTC	123
BUSH	018 049 076 094 106 107 123 134 139 142 172 193 195 209 217 225 226 232 307 378 379 457 458 470 480

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
BUSH(UK)	107 168
CAPSONIC	049 076 152 380
CARREFOUR	018 177
CASCADE	049 064 152 195
CASIO	049 152
CATHAY	049 152
CCE	049 152 379
CENTURION	049 152
CENTURY	065 163 324 411 413 481
CGE	011 090 093 094 107 139 142 163 168 346 348 369 407 413 421 480
CIHAN	217
CIMLINE	123 134 195
CITY	195
CLARIVOX	049 125 163
CLATRONIC	045 049 076 113 123 152 195 225 379 407 413 421
CMS HIGHTEC	379
COMTEL	125 217
CONCORDE	195
CONDOR	045 049 050 113 152 163 195 210 378 379 413 421 467
CONTEC	018 131 195 320 379
CONTINENTAL EDISON	014 074 182 186 232 424 453 462 463
COSMEL	195 213
CROSLEY	065 090 093 094 104 107 139 324 436 348 407 413 469 481
CROWN	049 152 163 170 195 209 232 407 421 470
CRYSTAL	477
CS ELECTRONICS	123 379 413
CTC	413
CTC CLATRONIC	045
CURTIS MATHES	126 190
CYBERTRON	123
DAENYK	042
DAEWOO	049 123 152 193 195 226 379 456 464
DAINICHI	123 379
DANSAI	049 076 141 152 195 379
DANSETTE	426
DANTAX	421
DATSURA	209
DAWA	049 152
DAYTON	049 152 195 226
DE GRAAF	107 139 209 307 479
DECCA	049 102 106 120 217
DECCA(UK)	046 049 050 102 106 131 152 379
DEITRON	049 152
DENKO	076
DENON	126
DERWENT	105

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
DESMET	049 113 152
DIGATRON	049
DIGILINE	049 152
DIXI	049 152 195 379 413
DORIC	104 105
DREAN	049 152
DTS	195
DUAL	049 050 107 139 152 156 168 182 243 379 414 417 424 468 470
DUAL TEC	040 050 168 195 379
DUMONT	045 065 080 102 139 146 324 375 379 449 469
DUMONT -FINLUX	020 045 078 091 104
DUX	049 112 152
DYNATRON	049 152
ELBE	049 107 123 152 172 210 243 369 391 411 421 435
ELBIT	217
ELCIT	045 046 062 065 104 107 150 168 324 413
ELECTA	076 378
ELECTRO TECH	195
ELEKTA	076 378
ELG	049 152
ELIN	020 049 107 139 152 172 195 379 470 479
ELITE	049 123 152 467
ELMAN	045 168
ELTA	195 076 379
EMERSON	012 042 049 065 113 152 225 324 378 413 475 481
ERRES	049 112 152
ESC	049 152
ETRON	049 107 139 152 195
EURO-FEEL	076
EUROMAN	049 076 152 379 421
EUROPA	049 152
EUROPHON	045 046 049 050 068 107 120 152 168 379 413
EXPERT	071 107 236 425
EXQUISIT	049 152 413
FAMILY LIFE	049 152
FENNER	152 195 226
FERGUSON	049 050 074 076 080 082 102 103 182 218 247 409 411 436 452 472
FIDELITY	049 050 076 107 152 225 307 379 475
FILSAI	050 370
FINLANDIA	033 139 172 197 209 307 375 470 474
FINLUX	020 042 045 049 078 080 090 091 102 104 107 139 146 152 163 197 210 324 375 379 407 408 428 429 437 449 469

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
FIRST LINE	045 049 094 102 107 134 139 152 191 195 209 210 226 379 411 413 457 470
FISHER	018 041 050 065 069 102 104 107 139 156 172 209 320 324 379 408 414 421 470
FLINT	049 102 123 152 380
FNR	045
FORMENTI	049 090 107 113 139 307 324 379 407 467 469 480 481
FORMENTI-PHOENIX	050 104 113 307
FORTRESS	190 324
FRABA	049 152 421
FRIAC	045 049 152 195
FRONTECH	066 076 139 195 307 379 413 466 470 477
FUJITSU	042 045 071 102 107 195 236 379
FUJITSU GENERAL	195 379
FUNAI	042 076 094
GALAXI	045 049 152
GALAXIS	045 049 152 163 421
GBC	104 107 139 168 195 226 480
GE	074 182 218 378
GEANT CASINO	107 425
GEC	049 102 104 107 120 152 171 172 307 379 470
GEC(UK)	046 050 102 107 150 162
GELOSO	062 104 107 139 168 171 195 226 307 413 469 481
GENERAL	064 074 182
GENERAL TECHNIC	195
GENEXXA	049 123 152 307 426 466
GOLDHAND	379
GOLDLINE	213
GOODMANS	018 042 049 076 102 134 139 141 152 182 193 195 218 225 226 232 379 428 450 456 464
GORENJE	421
GPM	123
GRADIENTE	049 152 170 177
GRAETZ	049 090 104 136 139 152 153 162 171 172 198 225 307 466 469 475
GRANADA	013 018 033 041 049 102 104 105 112 120 152 171 172 198 209 218 238 241 307 379 407 425 470 471 472 474
GRANADA(UK)	046 050 090 107 139 162 307
GRANDIN	049 107 113 123 152 195 378 380 425 435
GRONIC	045 379
GRUNDIG	049 080 090 152 232 247 249 407 454 455

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
HALIFAX	076 379
HAMPTON	379
HANIMEX	094
HANSEATIC	018 049 050 094 104 107 113 152 172 195 241 324 378 379 391 421 455 467 470 475
HANTAREX	045 046 049 152 195
HANTOR	049 152
HARLEY DAVIDSON	042
HARWOOD	049 152 195 426
HAUPPAUGE	049 152
HAVERMY	190
HCM	049 076 123 152 163 195 378 379 426
HEMA	195 379
HEMMERMANN	150 470
HIFIVOX	074 182 186 424 453 463
HIGASHI	050
HIGHLINE	049 076 152
HIKONA	123
HINARI	012 018 042 049 066 094 107 123 134 139 195 209 232 307
HISAWA	123 378 380 425
HIT	324
HITACHI	018 020 033 049 050 074 086 099 102 104 107 110 126 127 139 150 152 162 168 171 182 186 218 238 307 379 466 469 470 472 479
HITACHI FUJIAN	013
HITSU	123 195 380
HORNYPHON	049 112 152
HOSHAI	123 380
HUANYU	193 226 379
HYGASHI	379
HYPER	050 168 195 379 413
HYPERSONIC	172
HYPSON	049 076 152 217 378 379 380 425
IBERIA	049 152
ICE	049 076 123 152 195 225 379
ICES	123 379
IMPERIAL	011 049 090 093 094 107 142 152 163 168 307 346 348 369 407 413 421 470 480
INDIANA	049 152
INGELEN	090 104 136 139 153 162 171 198 232 435 466
INGERSOLL	195
INNO HIT	046 049 050 066 102 123 152 195 217 379 407 413
INNOVATION	049 152
INTERACTIVE	210
INTERBUY	076 195 413

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
INTERFUNK	049 065 067 074 090 104 107 112 139 150 152 153 172 182 307 324 413 421 453 463 466 475
INTERNAL	049 152
INTERVISION	045 049 055 076 107 123 152 225 232 378 379 380 413 421
IR	346
IRRADIO	049 066 090 123 152 195 407 413
ISUKAI	049 123 152 378
ITC	379 480
ITS	049 076 123 152 225 378 379
ITT	042 090 107 134 139 150 157 162 171 172 193 197 198 209 307 375 428 466 469 470 471 475 479
ITT-NOKIA	042 090 104 107 134 136 139 150 153 162 171 172 193 197 198 209 307 375 470 428 433 435 437
ITV	076 049 152 413
JEAN	018
JEC	141
JET POINT	365
JVC	018 103 123 170 182 225 409 433 439 465
KAISUI	049 050 123 152 195 378 379 380
KAMOSONIC	050
KAMP	379
KAPSCH	071 107 172 236 466
KARCHER	020 045 049 050 068 076 107 152 195 217 378 421 435
KATHREIN	455
KAWASHO	379
KB ARISTOCRAT	107
KENDO	045 049 055 134 152 172 210 413 421 435 476
KENNEDY	071 079 104 107 139 236 369 480
KINGSLEY	379
KLARMAX	371
KNEISSEL	049 152 210 243 369 391 411 421 435
KOLSTER	045 049 152 470
KNOKA	049 123 152 225
KONTAKT	232
KORPEL	049 152
KORTING	065 094 113 324 4213
KOSMOS	049 152
KOTRON	076 426
KOYODA	195
KRAKING	411
KRIESLER	050 065 079 112 152 160
KTV	050 379
KURO	445
KYOSHU	076 163 426
KYOTO	107
LECSON	049 152

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
LEMAIR	210
LENCO	049 107 152 195 226
LENOIR	050 195
LESA	413
LEYCO	049 076 094 102 152
LG(GOLDSTAR)	049 050 055 107 139 152 168 172 182 195 219 379 413 414 421 460
LIFESENK & TTER	049 112 152 345
LIFE	440 441 443 444
LIFETEC	049 076 123 152 195 226 440 441 443 444
LLOYD S	195
LOEWE	035 049 089 120 152 324 391 421
LOEWE OPTA	035 046 049 065 120 144 152 213 324
LOGIK	131 225
LOGIX	195
LUMA	071 107 110 152 171 172 195 210 226 236 307
LUMATRON	049 076 107 152 172 236 379
LUX MAY	049 152 195
LUXOR	042 050 090 107 127 139 150 172 197 209 307 375 428 429 470 472 473 475
LYCO	076
MAAZ	371
MADISON	049 152
MAGNADYNE	045 046 062 065 104 107 120 139 150 168 324 413 469
MAGNAFON	045 046 050 068 090 120 379 407 481
MAGNAVOX	018 042 049 152
MAGNUM	440 441 443 444
MANDOR	076
MANESTH	076 094 113 134 141 152 379 467
MANHATTAN	049 195
MARANTZ	049 152 455
MARELLI	324
MARK	049 152 195 226 379
MASUDA	123 195 225
MATSUI	012 018 041 049 050 094 100 102 106 107 131 134 141 150 152 171 195 209 218 225 232 247 307 379 380 470
MAXIMAL	139
MAXWELL	371
MEDIATOR	049 112 152
MEDION	049 152 195 217 457
MEGAS	435
MEGATRON	126
MELECTRONIC	020 049 074 152 182 193 195 197 210 226 375 379 408 413 428 429 466 470
MELVOX	425

•••••••••••••••• NUMERI DISPONIBILI DEL FORNITORE ••••••••••••••••

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
MEMOREX	099 195 217
MEMPHIS	102 125 195 213
MERCURY	049 152 195
METZ	049 065 067 070 092 247 324 412 420 454 481
MICROMAXX	049 152 195
MICROSTAR	440 441 443 444
MINERVA	080 090 232 247 249 407 454
MINOKA	049 152 426 470
MITSUBISHI	013 018 049 065 105 131 152 157 190 247 324 454
MIVAR	046 050 058 072 081 090 120 379 391 407 414 421 434
MONACO	195
MORGAN S	049 152
MOTION	407
MOTOROLA	190
MTC	152 379 421 470
MTEC	106
MULTISTANDARD	045
MULTITEC	049 152 195
MULTITECH	045 046 049 050 120 152 195 379 407 413 421 470
MURPHY	102 104 105 107 171 307 379
MURPHY(UK)	162
MUSIKLAND	123
MYRYAD	455
NAD	172 209 475
NAIKO	049 152
NAKIMURA	049 152 226
NAONIS	040 071 079 110 171
NAT	085 151
NATIONAL	033 085 104
NEC	018 049 113 131 152 177 195 226 379 380
NECKERMANN	011 049 050 065 107 139 152 163 210 247 249 307 324 357 379 413 421 455 470 481
NEDIATOR	152
NEI	049 125 152 225 477
NESCO	042 413
NETSAT	049 152
NETWORK	213
NEUFUNK	049 152 195 435
NEW TECH	049 050 152 182 195 379
NEW WORLD	123
NICAMAGIC	379
NIKKAI	018 049 076 102 123 125 139 141 152 195 213 379 066
NOBLEX	049 076 152
NOBLIKO	045 050 080 090 379 407
NOGAMATIC	074 182 186 424 453 463

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
NOKIA	090 104 107 134 136 139 150 153 157 162 171 172 193 197 198 209 226 307 375 428 429 433 437 465 470 475 478 479
NORDMENDE	049 074 083 150 152 182 186 218 247 307 424 453 463 469 481
NOVATRONIC	020 049 152 226
OCEANIC	086 094 104 107 108 109 139 172 209 425 466 469 475
OCEANIC(F)	150
ODEON	076
OKANO	049 076 102 152 421
OMEGA	076
ONCEAS	050
ONWA	123 225
OPERA	049 152
OPTIMUS	099
OPTONICA	190
ORBIT	049 152
ORION	012 042 045 049 076 094 113 131 134 139 150 152 191 195 216 366 367 426 467
ORLINE	049 123 152
ORMENTI-PHOENIX	104
ORMOND	195
OSAKA	066
OSAKI	049 066 076 102 106 123 152 226 379 426
OSIO	049 152
OSO	123
OSUME	018 102 123
OTAKE	450
OTTO VERSAND	018 049 050 074 094 104 107 113 134 139 152 172 190 218 247 249 357 362 379 413 414 454 455 467 469 470 480 481
P.T ACTRON	217
PAEL	050 379
PALLADIUM	049 107 152 163 210 247 324 357 379 413 421 470
PALSONIC	049 055 076 152 379 426
PANAMA	049 076 152 195 379 413
PANASONIC	016 049 099 104 107 139 151 152 172 396 420 466 469 481
PANAVISION	049 152 210
PATHE CINEMA	107 113 379 391 411 425 467 470 480 481
PATHE CINEMA(F)	050 168
PATHE MARCONI	014 074 182 186 424 453 462 463
PAUSA	195
PAUZA	195
PERDIO	049 102 107 113 152 467
PERFEKT	049 152

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
PERSHIN	425
PHILCO	011 016 049 065 090 093 094 104 107 126 142 152 163 168 324 346 348 369 407 413 421 480 481
PHILEX	471
PHILHARMONIC	379
PHILIPS	014 049 050 065 079 089 112 152 160 182 193 216 217 220 226 247 249 324 427 455 482
PHOENIX	049 050 102 104 107 113 152 324 379 421
PHONOLA	049 050 065 079 112 152 160 324 379
PILOT	049 152
PIONEER	049 074 152 172 182 209 218 307 421 427 466
PLANTRON	049 076 152 195
PLAYSONIC	379
POLICOM	074
POPPY	195
PORTLAND	226
POWERPOINT	232
PRANDONI-PRINCE	046 090 120 171 172 307 407 413
PRECISION	379
PREMIER	142
PRIMA	076 195 307
PRINCE	046 171
PRINZ	102 470
PROFEX	107 139 195 407 475
PROFI-TRONIC	045 049 152
PROLINE	049 102 112 191 366 436
PROSONIC	049 085 151 152 195 225 226 379 421
PROTECH	045 049 076 125 139 152 163 195 379 413 457 470 477 480
PROVISION	049 152
PYE	050 065 079 112 152 160 226 324
PYMI	049 112 152 195 226 324
QUADRA VISION	425
QUASAR	045 046 068 099 413
QUELLE	018 020 049 050 074 076 078 080 090 091 094 113 131 139 146 150 152 153 172 195 247 249 320 345 346 348 357 379 408 413 449 451 454 470 475 480 481
QUESTA	018
RADIALVA	049 074 107 123 152
RADIOLA	014 049 050 065 079 112 152 160
RADIOMARELLI	045 046 062 065 104 105 150 152 168 324 413
RADIONETE	020 150
RADIOSHACK	049 152
RADIOTONE	049 076 152 163 195 421 426
RANK ARENA	018
RCA	190 218 436
RECOR	049 152
RECTILIGNE	049 152
REDIFFUSION	018 059 104 105 139 171 172 307 471 475
REDIFFUSION(UK)	150 162
REDSTAR	049 152
REFLEX	049 152
REOC	460
REVOX	049 152 421
REX	040 071 079 107 110 152 171 210 236 243 307 413 466
RFT	076 102 241 324 391 421
RHAPSODY	379
R-LINE	049 152
ROADSTAR	049 076 123 152 163 195
ROBOTRON	065 324
RODEX	049 152
ROWA	458
ROWSONIC	050
ROYAL LUX	421 426
RTF	065
SABA	046 065 074 077 107 120 139 172 182 186 218 307 324 424 436 452 453 463 466 469 481
SACCS	411
SAGEM	378 380 435
SAISHO	012 050 076 107 131 134 195 307 379 477
SALORA	033 107 127 136 139 150 153 171 172 198 209 307 466 470 472 474 475 479
SAMBERS	045 046 068 090 120 407 481
SANDRA	379
SANELA	411
SANSUI	049 152 225
SANTON	195
SANYO	018 020 041 049 050 065 102 107 131 152 195 198 209 320 379 391 408 421 481
SAVE	049 152
SBR	049 112 152
SCHAUB LORENZ	090 104 139 139 1543 162 171 198 307 433 469 470 475
SCHNEIDER	014 040 049 050 065 069 079 104 107 112 123 139 152 156 160 168 172 182 195 225 243 307 379 382 413 414 417 457 468 470
SCOTT	042
SEARS	042
SEG	018 045 049 050 076 107 152 172 195 232 379 413 407 457 480

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
SEI	012 045 049 094 107 139 152 236 324 357 469 470 481
SEI SINUDYNE	446
SELECO	040 071 079 107 110 152 171 172 210 236 243 307 369 466 476
SENCORA	195
SENTRA	123 139 141 195
SERINO	380 435
SHARP	018 094 170 190 320 362
SHORAI	042 094
SIAM	049 152
SIAREM	045 046 065 104 107 120 139 324 469 481
SIEMENS	018 049 066 113 152 247 249 307 320 345 451 454 469 481
SIERA	050 065 079 112 152 160
SIERRA	049 112 152
SIESTA	421
SILVA	049 152 379
SILVER	018 042 049 076 152 172
SINGER	045 049 065 104 152 195 324 369 413 425
SINUDYNE	012 045 065 094 104 107 134 139 150 152 172 210 216 236 324 357 366 367 469 470 481
SKANTIC	307 472 473
SKY	049 152
SKYWORTH	448
SOGERA	113
SOLAVOX	066 102 107 139 172 307 466 471
SONAWA	123
SONITRON	209 379 421
SONNECLAIR	049 152
SONOKO	049 050 076 152 195 378 379
SONOLOR	107 139 172 209 357 425 466
SONTEC	049 094 152 421
SONY	018 045 131 211 346 357 358 370
SOUND & VISION	045 123 226
SOUND WAVE	049 113 163
SOUNDESIGN	042
SPECTRA	195
SSANGYONG	195
STANDARD	049 050 113 123 152 195 226 379
STARLIGHT	049 076 107 152 195
STENWAY	123 378
STERN	040 071 079 107 110 152 171 236 243 307 466
STRATO	049 076 152 195
SUNKAI	049 094 123 134 152 191 232 367 380
SUNSTAR	049 152 195 225
SUNWOOD	049 152 195
SUPERLA	379
SUPERTECH	049 123 152 195 379
SUPRA	195 226
SUSUMU	123 218
SUTRON	195
SWISSLINE	413
SYDNEY	379
SYSLINE	044
SYTONG	379
TACTUS	106
TANDBERG	065 074 078 172 182 210 213 420 449
TANDY	050 102 123 190 307 379 413 466
TASHIKO	018 050 107 177 379 470 474
TATUNG	049 050 102 106 120 131 152 217 379
TCM	440 441 443 444
TEAC	049 076 152 163 195 217 378 380 426 457 458 470
TEC	040 050 064 168 195 213 218 243 379 413 480
TECH LINE	049 152 195
TECHICA	123
TECHNEMA	113 467
TECHNICS	099
TECHNOLACE	042
TEDELEX	379
TEIRON	195
TEKNIKA	042
TELEAVIA	014 074 182 186 218 424 453 462 463
TELECOR	049 107 123 152 379
TELEFUNKEN	049 064 074 082 152 182 186 187 218 230 346 348 424 436 452 453 463
TELEFUSION	049 152
TELEGAZI	049 076 107 123 152
TELEMEISTER	049 113 152 467
TELESONIC	049 152
TELESTAR	049 152
TELETECH	049 152 195 213 413
TELETON	018 067 071 107 236 379 470
TELEVIDEON	050 104 107 113 379
TELEVISO	425
TEMCO	094
TEMPEST	049 152 195
TENNESSEE	049 152
TENSAI	020 050 055 094 113 123 152 195 225 226 379 413 450 467
TESMET	439
TETUNG	046
TEVION	049 152 195

•••••••••••••••• NUMERI DISPONIBILI DEL FORNITORE ••••••••••••••••

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
TEXET	050 123 195 226 379
THOMSON	014 024 049 064 074 134 152 182 186 218 230 424 436 453 462 463 470
THORN	049 102 103 106 141 152 218 226 346 348 408 409 411 454 464 470 475
THORN-FERGUSON	074 076 080 082 103 218 357 358 375
TOWADA	045 379 470 480
TOYODA	195
TOKAI	049 102 107 152 195 213 226 379
TOKYO	141 379
TOMASHI	123 378
TOSHIBA	018 045 128 141 369 379
TRAKTON	076
TRANS CONTINENS	046 049 152 171 307 379
TRANSONIC	049 152 380 458
TRANSTEC	379
TRIDENT	379
TRISTAR	123
TRIUMPH	012 046 049 128 152 197 375
UHER	049 069 071 080 090 113 152 163 226 236 307 407 414 421 467
ULTRA	409
ULTRAVOX	045 049 050 065 104 107 139 152 226 324 379 413 471
UNIC LINE	049 152
UNITED	049 152
UNIVERSUM	011 012 018 020 049 074 076 094 107 131 152 163 172 195 197 210 213 247 320 345 346 357 375 379 407 408 413 421 428 429 437 454 470 480
UNIVOX	049 107 152 213 324 411
UTAX	050
VEGAVOX	163
VESTEL	049 107 125 152 379
VEXA	152 195
VICTOR	170
VIDEO SYSTEM	049 152
VIDEOLOGIQUE	123 379
VIDEOSAT	413 447
VIDEOSYSTEM	049 152
VIDEOTECHNIC	113 226 379
VIDEOTON	107 472
VIDIKRON	045
VIDTECH	018
VIPER	213
VISIOLA	379
VISION	049 113 152 467
VISOREX	442
VISTAR	172 236
VOLTEC	074
VORTEC	152
VOXSON	049 065 090 152 163 171 307 324 407 466
WALTHAM	049 152 163 182 307 379 472
WATSON	049 107 113 123 152 195 247 467
WATT RADIO	045 050 068 104 107 139 150 379 470 480
WEGA	018 049 139 152 324
WEGA COLOR	065 088
WEGAVOX	195
WELTBLICK	113 152
WESTINGHOUSE	094 152
WESTON	168
WHARFEDALE	049 152
WHITE	045
WHITE WESTINGHOUSE	049 050 113 152 213 379 467
WINCO	426
WINDSTAR	378
XRYPTON	049 152
YAMISHI	049 123 152 378 379 380
YOKAN	049 152
YOKO	049 050 076 123 152 195 379 413 421 477
YORX	123
ZANUSSI	040 071 079 110 152 171 236 307 379
ZOPPAS	040 071 079 110 171 307

Note: Per gestire questo prodotto con il telecomando attuale della vostra TV Samsung è necessario inserire il codice 014 nel telecomando della TV per renderlo operativo.

RISOLUZIONE DEI PROBLEMI

In alcune aree, il segnale terrestre digitale potrebbe essere debole.
Per ricevere questi segnali, è consigliabile utilizzare un'antenna con potenziatore del segnale incorporato.

È possibile scaricare e aggiornare il software di sistema del ricevitore utilizzando un canale specifico indicato dall'emittente.
Maggiori informazioni verranno fornite direttamente dal distributore.

Problema	Possibile causa	Soluzione del problema
Non si accende il LED sul pannello frontale; non c'è alimentazione	Il cavo di alimentazione non è inserito correttamente	Inserire correttamente il cavo di alimentazione
Non appaiono immagini sullo schermo	Ricevitore in modalità Standby; Scart/HDMI non saldamente collegata all'uscita video del televisore; canale o uscita video non correttamente selezionati sul televisore	Impostare il ricevitore su "On"; Verificare la connessione del cavo scart; Verificare l'uscita canale e video sul TV (fr. manuale di istruzioniTV)
Non c'è audio	Il cavo audio non è collegato correttamente; livello volume = 0; audio disattivato	Verificare la connessione del cavo audio; Aumentare il volume sul televisore; premere il tasto MUTE
Il telecomando non funziona	Utilizzo non corretto del telecomando; Batterie scariche o inserite non correttamente	Puntare il telecomando verso il ricevitore; sostituire le batterie o inserirle correttamente
Qualità dell'immagine insufficiente	Forza del segnale troppo bassa	Verificare la connessione e correggere
Messaggio di errore "Segnale debole" sullo schermo	Cavo dell'antenna non collegato o non ben inserito; posizione non corretta dell'antenna	Verificare la connessione del cavo dell'antenna; controllare la posizione e correggere, verificare la potenza del segnale nel menu "Rilevamento Segnale"
Messaggio di errore "Nessun canale" sullo schermo	Ricevitore non ancora impostato	Scansione nel menu "Ricerca Canale"

SMALTIMENTO

Il dispositivo, il materiale di imballaggio, ad esempio la schiuma, e le batterie non devono mai essere gettati nella normale immondizia. È opportuno informarsi circa le norme in vigore nella zona di residenza e smaltire questi rifiuti in conformità con le norme previste per la raccolta differenziata.

SPECIFICHE TECNICHE

Terrestre	Ingresso frequenza	VHF, UHF, Banda
Sintonizzatore / Demodulatore	Standard	DVB-T (ETS 300 744)
	Ampiezza Banda del Canale	7 / 8Mhz (commutabile)
	COFDM Sistema	2K, 8K vettore Gerarchica sostenuto
	Tipo di demodulazione	QPSK, 16QAM, 64QAM
	Intervallo di guardia	1 / 32, 1 / 16, 1 / 8, 1 / 4 durata del simbolo attivo
	FEC	1 / 2, 2 / 3, 3 / 4, 5 / 6, 7 / 8
	Alimentazione per antenna attiva esterna	5V @ 35mA con protezione contro i sovraccarichi tramite cavo coassiale
Video Decoder	Standard video	MPEG-1 ISO / IEC 11172-2 MPEG-2 MP@ML ISO / IEC 13818-2 H.264 / AVC
	Field / Frame rate	50 / 25 Hz
	Risoluzione	576i / 576p / 720p / 1080i
	Modalità di visualizzazione	4:3, 16:9 & Letter Box
	Video Input / Output	TV SCART con R / G / B, CVBS OUT HDMI v1.3 digital video output w/ HDCP
Audio Decoder	Audio Standards	MPEG-1 layer I e layer II, AAC+, DD+
	Frequenza di campionamento	32, 44,1, 48 kHz
	Audio input / output	TV SCART per AL / AR OUT HDMI OUT Un I/F elettrico per l'audio digitale SPDIF OUT (OPTICAL)
Connettività	Modem PSTN Ethernet USB	V.90 / 92 10/100 Base Host 2.0, 5V@800mA max.
Software Upgrade	Compatibile DVB-SSU	Over The Air
Interfaccia del pannello posteriore	Connettore di ingresso RF	tipo IEC, femmina
	Loop attraverso il connettore di uscita	tipo IEC, Maschio
	CVBS, R/G/B video OUT AL / AR audio stereo OUT	TV SCART doppia
	Digital Video Output	HDMI
	Uscita audio digitale SPDIF	TosLink
	Modem	RJ-11

	Ethernet	RJ-45
	Power Jack	Staccabile
	Interruttore di alimentazione	
Pannello frontale	Tastierino 5 tasti, 1 LED indicatore accesione 7-segment display Sensore Infrarossi Doppio slot per smart card	PWR, CH su / giù, Volume + / - Un LED ON (Rosso)
Adattatore di alimentazione esterna	Tensione di alimentazione di ingresso	200-240V AC~
	Frequenza di alimentazione di ingresso	50/60 Hz
	DC output a STB	12V @ 2A
	Consumo energetico	Il funzionamento normale: 11.3W Max.: 24W
Operation Temperature	Funzionamento a Temperature	0 ~ 40 degree C
Accessori	Telecomando & Batterie	
	Manuale d'uso	

Nota : le specifiche del set top box possono essere modificate senza preavviso.

Corretto smaltimento delle batterie del prodotto

(Applicabile nei paesi dell'Unione Europea e in altri paesi europei con sistemi di conferimento differenziato delle batterie.)

Il marchio riportato sulla batteria o sulla sua documentazione o confezione indica che le batterie di questo prodotto non devono essere smaltite con altri rifiuti domestici al termine del ciclo di vita. Dove raffigurati, i simboli chimici Hg, Cd o Pb indicano che la batteria contiene mercurio, cadmio o piombo in quantità superiori ai livelli di riferimento della direttiva UE 2006/66. Se le batterie non vengono smaltite correttamente, queste sostanze possono causare danni alla salute umana o all'ambiente.
Per proteggere le risorse naturali e favorire il riutilizzo dei materiali, separare le batterie dagli altri tipi di rifiuti e riciclarle utilizzando il sistema di conferimento gratuito previsto nella propria area di residenza.

Corretto smaltimento del prodotto (rifiuti elettrici ed elettronici)

(Applicabile nei paesi dell'Unione Europea e in quelli con sistemi di raccolta differenziata)

Il marchio riportato sul prodotto o sulla sua documentazione indica che il prodotto non deve essere smaltito con altri rifiuti domestici al termine del ciclo di vita. Per evitare eventuali danni all'ambiente o alla salute causati dall'inopportuno smaltimento dei rifiuti, si invita l'utente a separare questo prodotto da altri tipi di rifiuti e di riciclarlo in maniera responsabile per favorire il riutilizzo sostenibile delle risorse materiali.
Gli utenti domestici sono invitati a contattare il rivenditore presso il quale è stato acquistato il prodotto o l'ufficio locale preposto per tutte le informazioni relative alla raccolta differenziata e al riciclaggio per questo tipo di prodotto.
Gli utenti aziendali sono invitati a contattare il proprio fornitore e verificare i termini e le condizioni del contratto di acquisto. Questo prodotto non deve essere smaltito unitamente ad altri rifiuti commerciali.

GARANZIA

Questo prodotto Samsung è garantito per un periodo di dodici (12) mesi dalla data di acquisto, da difetti di fabbricazione o nei materiali. Nel caso di riparazione, il prodotto dovrà essere riportato presso il rivenditore dal quale si è effettuato l'acquisto. Comunque tutti i rivenditori e i centri di assistenza tecnica autorizzata Samsung presenti nei paesi dell'Europa occidentale riconosceranno la validità di questa garanzia compatibilmente con le normative vigenti nel paese interessato. I centri di assistenza tecnica autorizzata sono gli unici riconosciuti idonei dalla Samsung ad effettuare l'attività di riparazione in garanzia. In caso di difficoltà la preghiamo di rivolgersi a:

SAMSUNG ELECTRONICS ITALIA S.P.A.
VIA C. DONAT CATTIN 5
20063, CERNUSCO SUL NAVIGLIO (MI)
TEL. 800.SAMSUNG (7267864) FAX. 02/92141801
Servizio Clienti: Tel. 800-SAMSUNG (7267864)
http://www.samsung.it

La presente costituisce una GARANZIA CONVENZIONALE del produttore. Essa pertanto lascia impregiudicati I diritti che gli articoli 128 e seguenti del Codice del Consumo (D.Lgs. n. 206/2005) prevedono a favore del consumatore nei confronti del venditore.

■ CONDIZIONI DI GARANZIA

1. La garanzia viene accettata solo nel caso in cui il certificato risulti completamente compilato ed esibito unitamente alla fattura comprovante l'acquisto o allo scontrino fiscale; inoltre nessuna alterazione o cancellazione dovranno essere apportate al certificato medesimo.
2. Gli obblighi della Samsung sono limitati alla riparazione o, a sua discrezione, alla sostituzione del prodotto o delle parti difettose.
3. Ribadiamo che i centri di assistenza tecnica autorizzata sono gli unici incaricati dalla Samsung a svolgere l'attivita' di garanzia.
4. La garanzia del presente prodotto decadra' immediatamente se lo stesso verra' modificato ed adattato a normative tecniche e di sicurezza diverse da quelle vigenti nel paese per il quale il prodotto e' stato progettato e costruito. Non sara' quindi previsto nessun rimborso per danni derivanti dalle modifiche qui menzionate.
5. La presente garanzia non copre:
   a) Periodici controlli, manutenzione, riparazioni o sostituzioni di parti soggette ad usura.
   b) Costi relativi a trasporto, spostamenti o installazione del presente prodotto.
   c) Danni causati da uso improprio, errori di utilizzazione o non corretta istallazione.
   d) Danni causati da incendio, acqua, fenomeni naturali, guerra, moti pubblici, incorretta alimentazione, ventilazione insufficiente od ogni altra causa non dipendente dalla Samsung.
6. Questa garanzia e' valida per ogni persona che prenda possesso formalmente del prodotto durante il periodo di garanzia.

SAMSUNG ELECTRONICS

Dichiarazione di Conformità

Prodotto

Per i seguenti

Prodotto : Ricevitore digitale terrestre
Modelllo(s) : SMT-T5040

Fabbricati in:

F1: PRIME BROADBAND INC.
Unit99, TongFuChun Industrial Area, ShiAo, Dalang, LongHua Town,
ShenZhen 518109 China

Dichiarazione e norme applicabili

La società Samsung Electronics Co., Ltd. dichiara che i prodotti di cui sopra sono conformi ai requisiti essenziali della Direttiva Bassa Tensione (2006/95/CE), della Direttiva Compatibilità Elettromagnetica (2004/108/CE) con riferimento alle norme armonizzate:

EN 60065:2002+AI:2006+A11:2008
EN 55013:2001+A1:2003+A2 :2006
EN 55022:2006+A1:2007,Class B
EN 61000-3-2:2006
EN 55020:2007
EN 55024:1998+A1:2001+A2:2003
EN 61000-3-3:2008

Dichiara inoltre la conformità al Regolamento (EC) N. 1275/2008 della Commissione del 17 dicembre 2008 recante misure di esecuzione della direttiva 2009/125/EC del Parlamento europeo e del Consiglio per quanto riguarda le specifiche di progettazione ecocompatibile relative al consumo di energia ed al regolamento (EC) No. 278/2009 in riferimento agli alimentatori esterni.

Rappresentante nella UE

Samsung Electronics Euro QA Lab.
Blackbushe Business Park
Saxony Way, Yateley, Hampshire
GU46 6GG, UK

10 April 2010
(Place and date of issue)

Yong Sang Park / S. Manager
(Name and signature of authorized person)

Instructions for use . . . . . **GB**

SMT-T5040

SAMSUNG

SMT-T5040

Instructions for use

GB

DIGITAL TERRESTRIAL RECEIVER

SAFETY INSTRUCTIONS

This STB has been manufactured to satisfy international safety standards.
Please read the following recommended safety precautions carefully.

MAINS SUPPLY: AC 220-240V~, 50/60Hz

OVERLOADING: Do not overload wall outlets, extension cords or adapters as this can result in fire or electrical shock.

LIQUIDS: Keep liquids away from the STB. Apparatus shall not be exposed to dropping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

CLEANING: Before cleaning, disconnect the STB from the wall socket. Use a cloth lightly dampened with water(no solvents) to clean the exterior.

VENTILATION: Do not block the STB ventilation holes. Ensure that free airflow is maintained around the STB. Never store the STB where it is exposed to direct sunlight or near heating equipment e.g. a radiator.
Never stack other electronic equipment on top of the STB.
Place the STB at least 30mm from the wall. Need at least 10mm from the top and both side of the STB for ventilation.

ATTACHMENTS: Do not use any attachment that is not recommended by the manufacturer; it may cause a hazard or damage the equipment.

CONNECTION TO THE CABLE TV SIGNAL AND TV:
Connect all components before plugging any power cords into the wall outlet. Always turn off the STB, TV and other components before you connect or disconnect any cables.

SERVICING: Do not attempt to service this product yourself. Any attempt to do so will make the warranty invalid. Refer all servicing to a qualified service agent.

LIGHTNING: If the STB is installed in an area subject to intense lightning activity, protection devices for the STB mains connector and modem telephone line are essential. The individual manufacturer's instruction for safeguarding other equipment, such as TV set, Hi-Fi, etc., connected to the STB must also be followed during lightning storms.

GROUNDING: Terrestrial cable MUST BE EARTHED. The grounding system must comply with SABS 061.

WARNING!

1. Follow these directions in order not to damage the power cord or plug.
   - Do not modify or process the power cord, power supply unit or plug arbitrarily.
   - Do not bend or twist the power cord too much.
   - Make sure to disconnect the power cord with holding the plug.
   - Separate heat appliances from the power cord as distance as possible in order to prevent the cover from being melted.

2. Failure to follow one of them may cause electrical shock.
   - Do not open the main body.
   - Do not insert metals or inflammable objects inside the product.
   - Do not touch the power plug with a wet hand.
   - Disconnect the power cord in case of lightning.
   - Do not cover the receiver's ventilation openings with items such as newspapers, clothes etc.
   - Do not place the receiver on top of household appliances that emit heat.

3. Do not use the product when it is out of order. If you continue to use the product with a defect, it can cause a serious damage to the product. Make sure to contact your local product distributor when the product is out of order.

4. The Mains plug is used as a disconnect device and shall stay readily operable at any time. To disconnect the apparatus from the AV mains, the plug must be pulled out from the mains socket, therefore the mains plug shall be readily operable.

CONTENTS

Safety Instructions **2**
General Features **5**
Connecting Your "STB" **6**
Descriptions **8**
Front Panel **8**
Rear Panel **9**
Remote Control Unit 10
Basic Functions 12
Operating The Receiver 14
Main Menu 14
1. Channel Guide 14
2. Reserved 14
2.1 Reserve 15
2.2 Reserved Program 15
3. Pay Per View Service 16
4. Settings 18
4.1 Channel 18
4.1.1 Add Favorite 18
4.1.2 Delete Favorite 18
4.1.3 Block Channel 19
4.1.4 Change Channel No 19
4.1.5 Delete Channel 19
4.2 Preference **20**
4.2.1 Parental Rating 20
4.2.2 Banner Duration 20
4.2.3 Change PIN Code 21
4.2.4 Channel Change Mode 21
4.2.5 Application Auto-start 21
4.2.6 Subtitle 22
4.2.7 Use LCN 22
4.3 System **23**
4.3.1 A/V Setting 23
4.3.2 HDMI Setting 23
4.3.3 Language Options 24
4.3.4 Upgrade Channels 24
4.3.5 Upgrade Software 24
4.3.6 Search Channel 25
4.3.7 System Status 25
4.3.8 Timezone 25
4.3.9 Modem Setting 26
4.3.10 Ethernet Setting 26
4.3.11 Factory Reset 26
5. USB Media **27**
5.1 FOTO **27**
5.2 JUKE BOX **27**
Universal Remote Controller Settings **28**
Troubleshootings **36**
Disposal **36**
Technical Specifications **37**

GENERAL FEATURES

1. USER SECTION

- 1000 PROGRAMMABLE CHANNELS
- ADVANCED ELECTRONIC PROGRAM GUIDE
- MULTI LANGUAGE SUPPORTED FOR OSD
- TELETEXT (VBI) SUPPORTED WITH MULTI LANGUAGE
- FULL FUNCTION INFRARED REMOTE CONTROL UNIT
- AUTO AND MANUAL SCAN FACILITY
- CHANNEL ORGANIZING (PROGRAMMABLE)
- AUTO UPDATED EPG

2. TUNER SECTION

- 161~862 MHz BAND TUNER
- 46~862 MHz RF LOOP-THROUGH OUTPUT (MALE)

3. VIDEO SECTION

- DVB-T COMPLIANT
- MPEG-2 VIDEO(MP@ML), H.264
- 1~15 Mb/s DATA RATE
- SUPPORTS ASPECT RATIO 4:3(NORMAL) AND 16:9 (WIDE SCREEN)
- FFT: 2K OR 8K
- 1 SCART, 1 HDMI

4. AUDIO SECTION

- MPEG-1 AUDIO LAYER I & II, AAC+, Dolby Digital & Dolby Digital +
- MONO, DUAL, STEREO AND JOINT STEREO AUDIO MODE
- 32, 44.1 AND 48 kHz SAMPLING FREQUENCIES
- VOLUME CONTROL AND MUTE FUNCTION THROUGH REMOTE CONTROL UNIT
- SPDIF DIGITAL AUDIO OUTPUT AND HDMI

CONNECTING YOUR STB

1. LOCATION OF THE RECEIVER Connecting Figure

Your RECEIVER should be placed under proper ventilation.
Don’t put in completely enclosed cabinet that will restrict the flow of air, resulting in overheating.
The location should be safeguarded from direct sunlight, excess moisture, rough handling or household pets.
Avoid stacking other electronic components on the top of the receiver.
The location should be safely accessible by the cable from your antenna system.

2. CONNECTING THE RECEIVER WITH AERIALS

You can connect the receiver to the following type of aerials:

- Use a standard outdoor roof aerial intended for receiving channels between VHF and UHF.
- Because many older roof-mounted aerials may only receive a limited number of channels, it is difficult or impossible to receive digital channels transmitted on higher frequencies. If so, you may replace the roof aerial.
- Some outdoor aerials are directed towards an analog transmitter. The aerial must be directed towards a digital TV transmitter.
- It is not desirable to use indoor or window mounted aerials, as it will be difficult or impossible to receive digital channels.

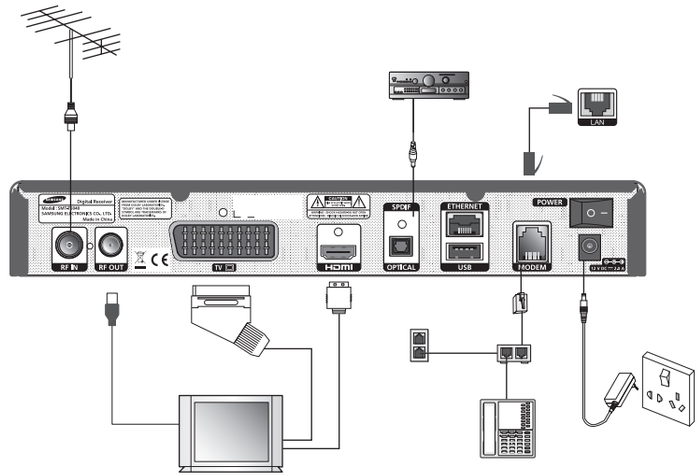
3. CONNECTING THE RECEIVER TO TV

To connect the receiver with your television, you can use SCART Cable, connect the SCART connector marked TV to the respective SCART port on the TV, or HDMI cable connect the HDMI connector marked HDMI to the respective HDMI port on the TV.

4. CONNECTING DIGITAL AUDIO SYSTEM

Connect a fiber optic cable between SPDIF on the receiver and OPTICAL on the Digital Audio System.

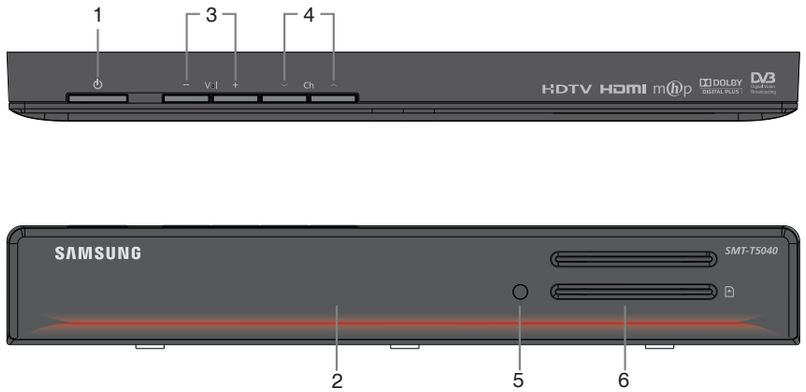
Connecting Figure



Note : In some region, the digital terrestrial signal may be weak.
So you’d better use the antenna in which the booster was built, for watching the weak signal channels.

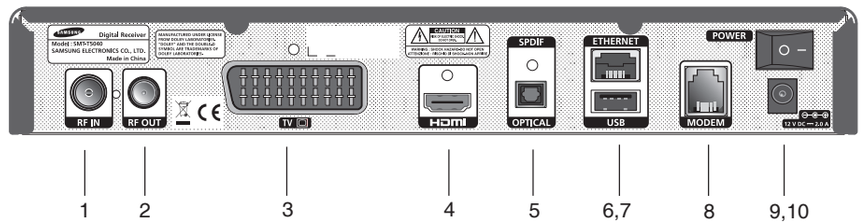
DESCRIPTION

Front Panel



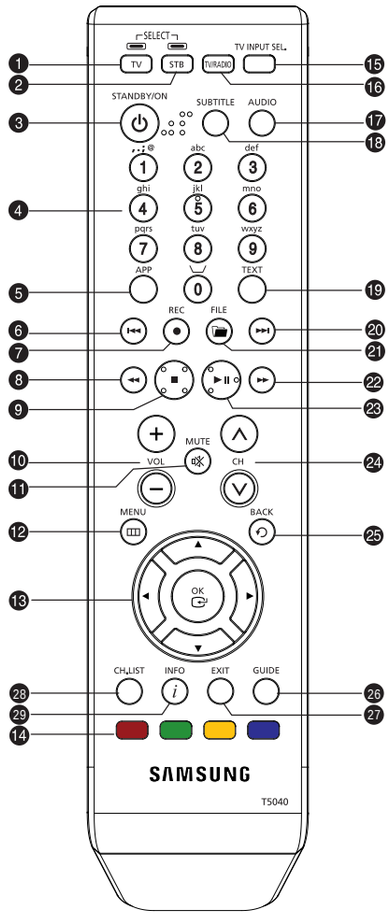
1. ⏻/I	This key is used to turn the receiver on and off (Standby).
2. LED & Display	When the unit is turned on, the indicator lights and display on.
3. Vol+ / Vol-	These keys are used to change the volume.
4. CH+ / CH-	These keys are used to change the channels.
5. Infrared Sensor	This is to receive the IR commands from the Remote Control Unit.
6. Card Slot	Slots for smartcards.

Rear Panel



1. RF IN	Use to connect a terrestrial antenna.
2. RF OUT	This is used to enable connection of Analog receiver. Receiver provides RF loop through.
3. TV	This is used to connect to your TV.
4. HDMI	This is used to connect to to your TV.
5. SPDIF	Output for connection to a digital amplifier.
6. USB	This is used to connect to USB memory storage.
7. ETHERNET	This is used to connect LAN network.
8. MODEM	Modem is a terminal which shares a line with a phone using splitter. It is used for handling PPV and transferring subscription information.
9. DC POWER	This is used to connect to DC 12V / 2A adaptor.
10. POWER SWITCH	This is used to power on/off Receiver.

Remote Control Unit



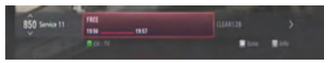
Note : When inserting batteries, make sure that the polarity(+/-) is correct.

1. **TV** This key is used to control your TV set.
2. **STB** This key is used to control the STB set.
3. **STANDBY/ON** Puts the STB in stand-by mode (no signal to TV).
4. **0-9 Numeric key** Enter numeric value and to select the channel directly by entering number on the Service list.
5. **APP** This key is used to access the application manager
6. **⏮** This key is used to play previous media file while a media file is played
7. **REC(●)** This key is used to perform record function
8. **◂◂** This key is used to perform rewind while a media file is played
9. **■** This keys is used to stop playback of current media file
10. **VOL+/VOL-** These keys are used to increase or decrease the volume
11. **MUTE(🔇)** This key is used to toggle between normal & muted audio.
12. **MENU** This key is used to open up the menu or return to the previous menu.
13. **Tasto freccia OK(▲▼◄►)** Move the highlight bar for the MHP Application. Enter and confirm any data to the receiver in the menu system.
14. **Tasti colore (ROSSO, VERDE, GIALLO, BLU)** Used to select special operation for the STB.
15. **TV INPUT SEL.** Used to select your TV input.
16. **TV/RADIO** Toggle between the TV and Radio channel.
17. **AUDIO** This key is used to select the soundtrack list for the current service
18. **SUBTITLE** This key is used to select the subtitle mode
19. **TEXT** This key is used to select the teletext mode
20. **⏭** This key is used to play next media file while a media file is played
21. **FILE(🗀)** This key is used to explore file directory of external storage device
22. **►►** This key is used to perform fast forward while a media file is played
23. **⏯** This key is used to perform playback or pause of media files
24. **CH+/CH-** These keys are used to change channels
25. **BACK** This key is used to return to the previous menu
26. **GUIDE** Used to displays the TV/Radio Program guide
27. **EXIT** Exit a menu or return to the previous menu
28. **CH.LIST** Used to display service list
29. **INFO** Used to display channel information

BASIC FUNCTIONS

1. Display Screen

Before you can view the television program, you must perform the installation.
Therefore you will see only menu images at first.
After the television channels have been programmed, you will see the following picture (banner) each time you switch channels:



First you will see the banner described above.
After pressing the *i* key a second time you will receive detailed program information for current program can be displayed on another banner, if there is more information.
When this information is more than one page, use the ▲/▼ keys to move up and down pages.

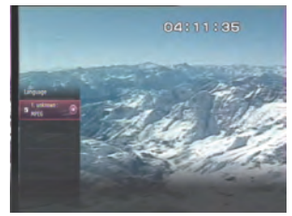
Note : This service depends on service provider.

2. Volume Control

To control the volume level :

- Press the **VOL+** or **VOL-** keys to adjust the volume level.
- Press the **MUTE** key to turn to silence mode.
- Press the **MUTE** key again or **VOL+** or **VOL-** keys in order to cancel the mute function.

3. Select Soundtrack



- Press the **AUDIO** key to see the soundtrack list.
- Press the ▲/▼ and **OK** keys to select one.

4. Service List

- Press the **CH.LIST** key while you are viewing a program.
- Select the TV or Radio channel list by pressing the ◄/► key.
- Select the channel by pressing the ▲/▼and press the **Green** / **Blue** color key for moving up or down pages on the lists.
- Press the **OK** key to watch that channel.

5. EPG (Electronic Program Guide)

EPG-Electronic Program Guide The electronic program guide gives you a channel list for the channels.

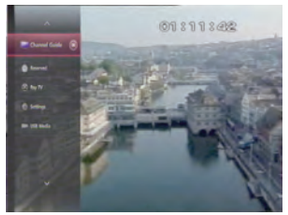
Note : 1. This service depends on service provider.
2. After receiver recognized the **GMT**-time from the signal which takes few seconds, it can display correct **EPG** information.

- Press the GUIDE key while you are viewing a program. This function is displayed on the screen by using only time.
- **RED** key : Red key is used to reserve channel.
- **GREEN** key : Green key is used for searching for genre.
- *i* key : This key is used to watch the program information, if there is more information than one page. Use the ▲/▼ keys to move up and down pages.
- ◄/► key : Use to display the program list by 30 minutes per block.
- Select the channel by pressing the ▲/▼ keys and press the **OK** key to watch this channel.

OPERATING THE RECEIVER

Main Menu

After installing your antenna system and STB with appropriate connectors.



- Plug in the AC main power and switch on the receiver.
- Press the **MENU** key to bring up the main menu.

The following on screen display will appear:

The sub menu topics will be displayed.
For the sub-menus: Channel Guide, Reserved, Pay TV, Settings and USB Media.

1. Press the **CHANNEL GUIDE** of the sub menu topics.

The channel menu will be displayed.

Note : 1. This service depends on service provider.
2. After receiver recognized the GMT-time from the signal which takes few seconds, it can display correct EPG information.

2. Press the **Reserved** of the sub menu topics.

The reserved menu will be displayed. For the reserved-menus: Reserve, Reserved program.

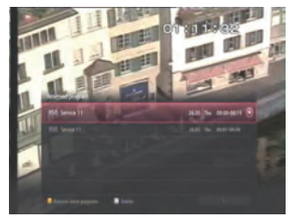
2.1 Reserve

If you want to set to auto start or delete the reserved channel, please follow the instruction below.

- Select Repeat by pressing the ◄/► keys (Once, Daily, Mon, Tue, Wed, Thu, Fri, Sat, Sun)
- Press the **GREEN** key to show all channels, Select the channel by pressing the ▲/▼ keys.
- Enter the StartTime and EndTime by pressing the numeric keys.
- Select Reserve and press the **OK** key for confirmation.

2.2 Reserved Program

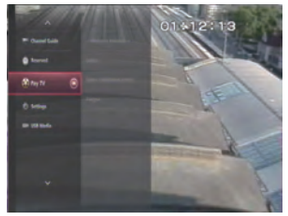
If you want to set to auto start or delete the reserved channel, please follow the instruction below.



- Select the channel by pressing the ▲/▼ keys.
- Press the **OK** key to delete the reserved channel.
- Press the **YELLOW** key to reserve more programs.
- Press the ▲/▼ keys to change menu item, ◄/► keys and number keys to change options, then select Reserve and press the **OK** key for confirmation

3. Press the **Pay TV** of the sub menu topics.

The Pay TV menu will be displayed. For the Pay TV menus: Mediaset Premium, Irdeto Conditional Access (Dahlia), Conax Conditional Access, Pangea.

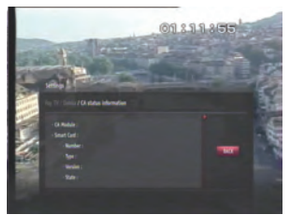


3.1 Mediaset Premium

Mediaset Premium provides the Card Information for Mediaset broadcasting service. When the Card is inserted, the serial number, the current credit and recharge information are shown on the Menu. Other list of packages is also available on the Menu for future reference.

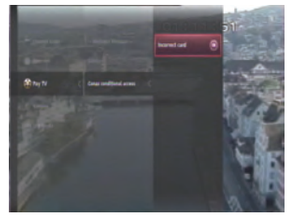
3.2 Irdeto Conditional Access (DAHLIA)

DAHLIA provides the Card Information for DAHLIA broadcasting service. It can also check the current Irdeto version and receive messages from the broadcasting company.



3.3 Conax Conditional Access

Conax CA provides the Card Information for Conax broadcasting service. When the Card is inserted, it can check the subscription and the event lists, the current tokens available, the serial number and the Conax version. It can also change the PIN number of the Card and the level of the program rating.

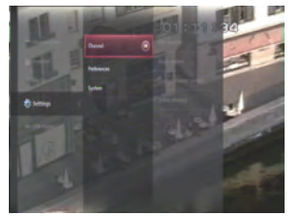


3.4 Pangea

Pangea provides the Card Information for the broadcasting services that support Nagra CA. When the Card is inserted, the serial number, the current credit and recharge information are shown on the Menu. Other list of packages is also available on the Menu for future reference.

4. Press the **Settings** of the sub menu topics.

The settings menu will be displayed. For the settings-menus: Channel, Preferences, and System.



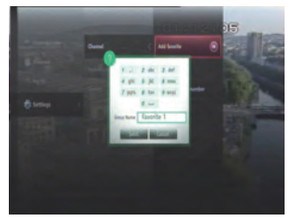
4.1 Press the **CHANNEL** of the sub menu topics.

The channel menu will be displayed. For the channel-menus: Add Favorite, Delete Favorite, Block Channel, Change Channel Number, Delete Channel.

4.1.1 Add Favorite

If you want to add the favorite group list, please follow the instruction below.

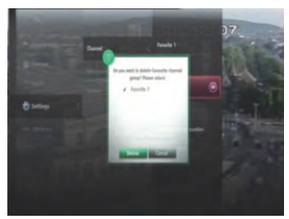
- Input Group Name by pressing the number keys, and select SAVE and press the **OK** key for confirmation.
- Press the **OK** key to add a channel into the favorite channel list.
- Select SAVE and press the **OK** key for confirmation.



4.1.2 Delete Favorite

If you want to delete the favorite group list, please follow the instruction below.

- Press ▲/▼ keys and the **OK** key to select favorite group list.
- Select Delete and press the **OK** key for confirmation.



4.1.3 Block Channel

- Select the channel by pressing the ▲/▼/◄/► keys.
- Select the channel block by pressing the **OK** key.
- Select SAVE and press the **OK** key for confirmation

Whenever you need to view the blocked channel, you will have to enter the PIN Code at the request window.

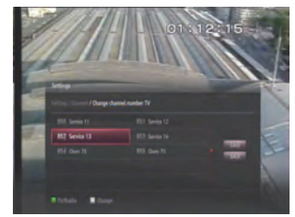
To cancel the block :

- Press the **OK** key again in order to cancel the lock.

4.1.4 Change Channel No

If you want to change channel number, please follow the instruction below.

- Select the channel by pressing the ▲/▼/◄/► keys.
- Press the **OK** key to change channel number.
- Erase the old channel number by pressing the ◄key
- Enter the new channel number by pressing the numeric keys.
- Select SAVE and press the **OK** key for confirmation
- Press the **GREEN** key to switch TV channel or Radio channel.



4.1.5 Delete Channel

- Select the desired channel you want to delete by pressing the **OK** key.
- Press the **YELLOW** key to delete all channels.
- Select SAVE and press the **OK** key for confirmation.

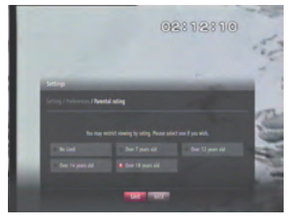
4.2 Press the **PREFERENCE** of the sub menu topics.

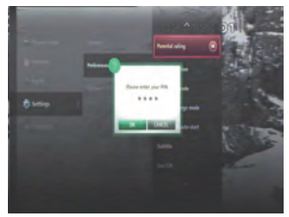
The preference menu will be displayed. For the preference-menus: Parental Rating, Banner Duration, Change PIN Code, Channel Change Mode, Application Auto Start, Subtitle, Use LCN.

4.2.1 Parental Rating

Parental Rating protects your children from adult content, select the first option of Preference, "**Parental Rating**".

- Use the ▲/▼/◄/► keys to select age for your youngest child then select SAVE and press the OK key for confirmation.
- All services which age grades are equal or greater than set will be blocked and request to enter the PIN Code.
- If you want to deactivate, select "No Limit".
- By default, Activation is "On" and selected Limit age is "Over 18 years old".





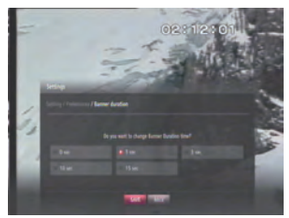
Please enter the PIN Code.

- This banner is shown if service which age grade is greater than set in Parental Control menu. Enter four digits PIN Code to hide this banner and show service content. Factory PIN Code is 0000, and you can change it in Change PIN Code menu.

4-2-2 Banner Duration

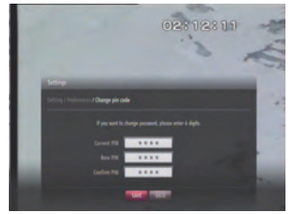
You can set the display (banner) time, select the second option of Preference, "**Banner Duration**".

- Set the display duration of the information (banner) box displayed in the screen. The time ranges from 0 to 15 seconds.



4-2-3 Change PIN Code

To change the PIN Code, select the third option of Preference, "**Change PIN Code**".



This will take you to the following menu:

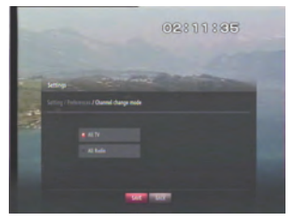
In this option, you need to enter the current PIN Code at the first cursor, and at the second cursor enter the desired PIN Code. To confirm, you need to enter the new PIN Code again. Please remember the PIN Code should be a 4 digit numerical value.

THE FACTORY PRESET PIN CODE : 0 0 0 0.

Note : If you forget the PIN Code, contact your dealer or service provider. Once you change password, please do not forget and keep well.

4-2-4 Channel Change Mode

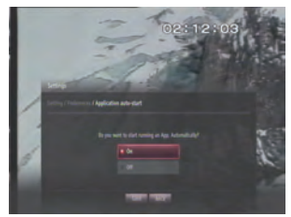
If you want to change the display mode of channel, please follow the instruction below.



- Select **All TV** or **All Radio** or **Favorite Group** with the ▲/▼ keys.
- Select SAVE and press "**OK**" for confirmation.

4-2-5 Application Auto-start

If you want to change the display mode of MHP application, please follow the instruction below.



- Select **On** or **Off** in Application Auto-start mode with the ▲/▼ keys.
- Select SAVE and press "**OK**" for confirmation.

Note : **Exit** without **OK** key makes MHP App Control unchanged.

4.2.6 Subtitle

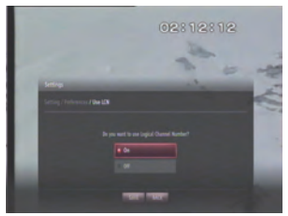
If you want to change the display mode of Subtitle, please follow the instruction below.

- Select **On** or **OFF** in Subtitle mode with the ▲/▼ keys.
- Select SAVE and press "**OK**" for confirmation.

4.2.7 Use LCN

If you want to select the mode of LCN, please follow the instruction below.

- Select **Yes** or **No** in Use LCN mode with the ▲/▼ keys.
- Select SAVE and press "**OK**" for confirmation.

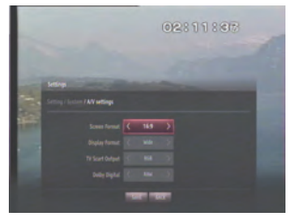


4.3 Press the **SYSTEM** of the sub menu topics.

The System menu will be displayed. For the System-menus: A/V Setting, HDMI Setting, Language Options, Upgrade Channels, Upgrade Software, Search Channels, System Status, Timezone, Modem Settings, Ethernet Setting, Factory Reset.

4.3.1 A/V Setting

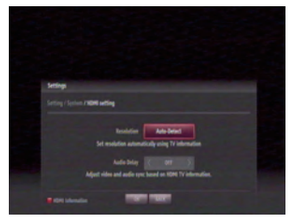
You can set the various A/V settings you want. Place the cursor on this sub menu and press the OK key.



- Press the ▲/▼ keys to move the sub items and press the ◄/► keys to select the option.
- Select SAVE and press the **OK** key for confirmation.
- Press the **MENU/EXIT** keys to exit the menu.
- Select the Screen Format according to your TV: Full Screen **4 : 3** ratio or Standard **16 : 9** ratio type.
- Select the Display Format : **Full Screen** or **Letter Box**, when screen format is 4:3.
- Select the Display Format : **Standard** or **Wide**, when screen format is 16:9.
- Select the TV Scart Output Type : **CVBS** or **RGB**.
- Select the Dolby Digital Type : **Dolb**y D or **RAW** or **PCM**.

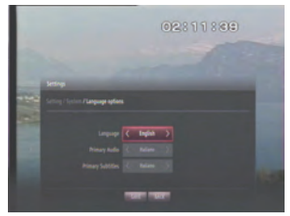
4.3.2 HDMI setting

You can set HDMI settings you want. Place the cursor on this sub menu and press the OK key.



- Press the ▲/▼ keys to move the sub items and press the ◄/► keys to select the option.
- Select OK and press the **OK** key for confirmation.
- Press the **MENU/EXIT** keys to exit the menu.
- Select the Audio Delay : **OFF** or **ON**.

4.3.3 Language Options



IThe “**Language Options**” option allows the user to select the desired language of the Menu, Primary Audio, and Subtitle.

- To accommodate user from different regions speaking different languages, Menu languages are available 5 languages. (Italiano, Deutschland, Español, Français and English)
- To select the desired language menu, press the ◄/► keys to change language then select SAVE and press the **OK** key.

4.3.4 Upgrade Channels

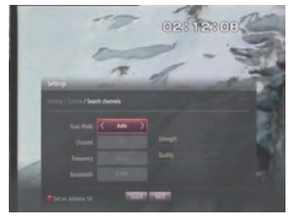
You can download and upgrade the channels of the receiver through a specific channel through a specific channel designated by the broadcaster. Place the cursor on this sub menu and press the OK key.

- Press the ▲/▼ keys to move the sub items and press the ◄/► keys to select the option.
- Select OK and press the **OK** key for confirmation.
- Press the **MENU/EXIT** keys to exit the menu.
- Select the In Standby mode : **Yes** or **No**.
- Select the In Operate mode : **Yes** or **No**.
- Select the Check Time by press the ◄/► keys.
- Select the Check Frequency : **Weekly** or **Daily**.

4.3.5 Upgrade Software

You can download and upgrade the system software of the receiver through a specific channel through a specific channel designated by the broadcaster. The Broadcaster will provide you with more information about that. Downloading may take a While, ‘During downloading’ don’t turn off the receiver.

4.3.6 Search Channel

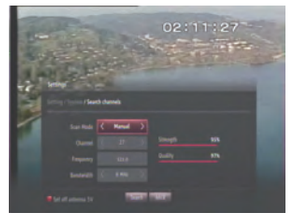


The sub menu “**Search Channel**” will enable download of the channels automatically from the preprogrammed load, or manual scanning channels.

To download channels automatically,

You can select Auto Search and press **OK** key to perform “Auto Search”. Auto Scanning menu will be displayed. All the channels in the list will be automatically downloaded.

To download channels manually,

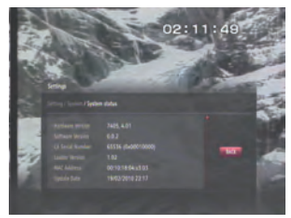


- Select the Channel Number. You can select the specified channel you want to find.

The followings are defined as a default, but optionally you can choose it. Signal Status bar shows you if it is valid.

- Input the frequency of the channel you want to find.
- Select the bandwidth. You can select the value of 7 or 8 MHz.
- After select option, select Search and press the OK key to start the scanning process.

4.3.7 System Status



If you have to contact your service provider or a service center they might ask for information available from this menu. Place the cursor on this sub menu and press the **OK** key. The following will be the on-screen display.

4.3.8 Timezone

The “Timezone” option allows the user to select the desired timezone.

- Press the ◄/► keys to change the Local time in Time Zone. The local time will be changed according to your location.

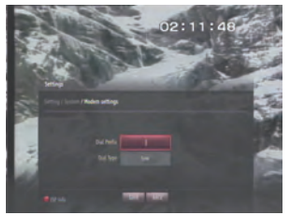
GMT is referred to the standard time of Greenwich. This cannot be changed.

- Press the ◄/► keys to choose “Summer Time” option “On” or “Off”.

4.3.9 Modem Setting

To set the modem, please follow the instruction below.

- Press the ▲/▼ keys to move the sub items and press the ◄/► keys to select the option.
- Enter the Dial Prefix number by pressing the numeric keys.
- Press the ◄/► keys to select the Dial type. Tone or Pulse.
- Select SAVE and press the **OK** key for confirmation.
- Press the **RED** key to enter the Pop number, User name, Password and DNS Server
- Press the **GREEN** key to test modem working.
- Select SAVE and press the **OK** key for confirmation.



4.3.10 Ethernet Setting

To set the ethernet, please follow the instruction below.

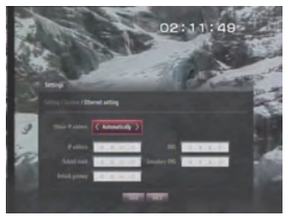
- Press the ▲/▼ keys to move the sub items and press the ◄/► keys to select the option.
- Select Obtain IP address mode : **Automatically** or **Manually**.

Automatically mode:

- Select SAVE and press the **OK** key for confirmation.

Manually mode:

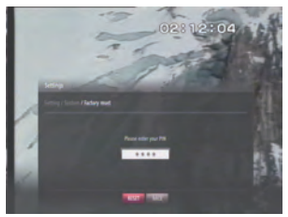
- Press the number keys to enter the IP address, Subnet mask, Default gateway, DNS, and Secondary DNS.
- Select SAVE and press the **OK** key for confirmation.



4.3.11 Reset to Factory Defaults

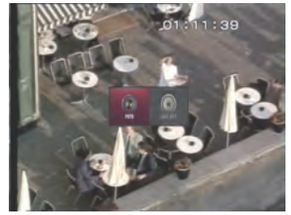
This is to restore the factory set values in case the user has encountered some problems after changing any values of channel data and others which may be in error. At the request window, if you press the OK key, the receiver will be reset to factory default settings automatically.

Note : This cause your previous settings to be deleted!



5. Press the **USB Media** of the sub menu topics.

The settings menu will be displayed. For the settings-menus: FOTO, JUKE BOX.



5.1 Press the **FOTO** of the sub menu topics

The photo browser will be displayed.

- Press the ▲/▼ keys to move between image files to see screen shots.
- Press the **OK** key for select.
- Press the **MENU/EXIT** keys to exit the menu.
- Select and press **OK** key to switch to photo view.
- Press the ◄/► keys to move between image files to see more photos.

5.2 Press the **JUKE BOX** of the sub menu topics

The audio file browser will be displayed.

- Press the ▲/▼ keys to move between audio files.
- Press the **OK** key for select.
- Press the **MENU/EXIT** keys to exit the menu.
- Select and press **OK** key to start play.

UNIVERSAL REMOTE CONTROLLER SETTINGS

1. Keep pressed TV button and in the meantime insert the 3 Digit of the relative TV Brand Code
2. TV Operating buttons: **TV STANDBY/ON, NUMERIC(0~9), CH+/-, VOL+/-, INPUT SEL., MUTE**

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
SAMSUNG	001 002 003 004 005 006 007 008 009 010 050 066 076 102 195 217 365 379 421
A.R. SYSTEMS	049 152
ACCENT	049 152
ACEC	112
ACURA	195
ADMIRAL	065 076 163 171 190 307 324 369 466 481
ADYSON	379
AGASHI	076 379
AGEF	324
AIKO	049 076 102 141 152 172 195 225 379
AIWA	377 459
AKAI	049 050 055 066 076 102 107 123 139 141 150 152 172 182 195 209 225 379 428 433 437 471 475
AKIBA	049 123 152 380 378
AKITO	049 106 152
AKURA	049 076 123 195 378 426 470
ALARON	042 379
ALBA	018 049 050 107 123 134 163 168 195 225 232 379 413 421 457
ALBIRAL	371
ALCYON	407
ALLORGAN	050 094 236 379
ALLSTAR	049 152
AMPLIVISION	113 379 421 425
AMSTRAD	012 049 076 123 131 152 172 195 225 426 476
ANAM	049 152 195
ANAM NATIONAL	049 152
ANGLO	076 195
ANITECH	049 076 152 195 407
ANSONIC	045 049 107 112 152 195 210 226 391 413 421
ARC EN CIEL	074 182 186 424 453 463
ARCAM	379 424
ARISTONA	049 050 065 079 112 152 160
ARTHUR MARTIN	107 127 136 139 153 307 425
ASA	020 065 078 080 091 146 171 197 307 324 375 408 449
ASBERG	049 152 407
ASORA	195
ASTRA	195
ASUKA	050 076 123 378 379
ATLANTIC	049 050 071 113 152 236 379
ATORI	195

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
AUCHAN	107 425
AUDIOSONIC	049 074 076 152 182 195 213 379 421
AUDIOTON	050 076 379 421
AUSIND	090 407
AUTOVOX	050 071 078 079 080 083 090 156 236 324 379 407 413 449 468 470
AWA	018 049 131 152 195 226 320 379 426 433
AYOMI	411
BAIRD	074 102 182 209 218 379 409
BANG & OLUFSEN	324 483
BARCO	107 371 480
BASIC LINE	049 107 123 195 226 378
BASTIDE	379
BAUR	049 107 150 152 172 247 249 357 414 454 470 475
BEKO	152 241 421 433 460
BEON	049 152 163
BEST	213 421
BESTAR	049 152 226 421
BINATONE	379
BLACK STAR	413
BLACKTRON	378
BLACKWAY	378
BLAUPUNKT	057 060 113 247 249 345 451 454 481
BLUE SKY	049 123 152 195 217 232 378 380 457
BLUE STAR	378
BONDSTEC	413
BOOTS	050 106 379
BPL	049 152 378
BRANDT	014 074 182 186 218 424 436 452 462
BRANDT ELECTRONIC	074 453 463
BRANDT ELECTRONIQUE	074 182 186 453
BRINKMANN	049 152 163
BRIONVEGA	049 065 083 152 167 172 324 356 476
BRITANNIA	379
BROTHER	076
BRUNS	065 324
BSR	094 107 110 139 168
BTC	123
BUSH	018 049 076 094 106 107 123 134 139 142 172 193 195 209 217 225 226 232 307 378 379 457 458 470 480

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
BUSH(UK)	107 168
CAPSONIC	049 076 152 380
CARREFOUR	018 177
CASCADE	049 064 152 195
CASIO	049 152
CATHAY	049 152
CCE	049 152 379
CENTURION	049 152
CENTURY	065 163 324 411 413 481
CGE	011 090 093 094 107 139 142 163 168 346 348 369 407 413 421 480
CIHAN	217
CIMLINE	123 134 195
CITY	195
CLARIVOX	049 125 163
CLATRONIC	045 049 076 113 123 152 195 225 379 407 413 421
CMS HIGHTEC	379
COMTEL	125 217
CONCORDE	195
CONDOR	045 049 050 113 152 163 195 210 378 379 413 421 467
CONTEC	018 131 195 320 379
CONTINENTAL EDISON	014 074 182 186 232 424 453 462 463
COSMEL	195 213
CROSLEY	065 090 093 094 104 107 139 324 436 348 407 413 469 481
CROWN	049 152 163 170 195 209 232 407 421 470
CRYSTAL	477
CS ELECTRONICS	123 379 413
CTC	413
CTC CLATRONIC	045
CURTIS MATHES	126 190
CYBERTRON	123
DAENYK	042
DAEWOO	049 123 152 193 195 226 379 456 464
DAINICHI	123 379
DANSAI	049 076 141 152 195 379
DANSETTE	426
DANTAX	421
DATSURA	209
DAWA	049 152
DAYTON	049 152 195 226
DE GRAAF	107 139 209 307 479
DECCA	049 102 106 120 217
DECCA(UK)	046 049 050 102 106 131 152 379
DEITRON	049 152
DENKO	076
DENON	126
DERWENT	105

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
DESMET	049 113 152
DIGATRON	049
DIGILINE	049 152
DIXI	049 152 195 379 413
DORIC	104 105
DREAN	049 152
DTS	195
DUAL	049 050 107 139 152 156 168 182 243 379 414 417 424 468 470
DUAL TEC	040 050 168 195 379
DUMONT	045 065 080 102 139 146 324 375 379 449 469
DUMONT -FINLUX	020 045 078 091 104
DUX	049 112 152
DYNATRON	049 152
ELBE	049 107 123 152 172 210 243 369 391 411 421 435
ELBIT	217
ELCIT	045 046 062 065 104 107 150 168 324 413
ELECTA	076 378
ELECTRO TECH	195
ELEKTA	076 378
ELG	049 152
ELIN	020 049 107 139 152 172 195 379 470 479
ELITE	049 123 152 467
ELMAN	045 168
ELTA	195 076 379
EMERSON	012 042 049 065 113 152 225 324 378 413 475 481
ERRES	049 112 152
ESC	049 152
ETRON	049 107 139 152 195
EURO-FEEL	076
EUROMAN	049 076 152 379 421
EUROPA	049 152
EUROPHON	045 046 049 050 068 107 120 152 168 379 413
EXPERT	071 107 236 425
EXQUISIT	049 152 413
FAMILY LIFE	049 152
FENNER	152 195 226
FERGUSON	049 050 074 076 080 082 102 103 182 218 247 409 411 436 452 472
FIDELITY	049 050 076 107 152 225 307 379 475
FILSAI	050 370
FINLANDIA	033 139 172 197 209 307 375 470 474
FINLUX	020 042 045 049 078 080 090 091 102 104 107 139 146 152 163 197 210 324 375 379 407 408 428 429 437 449 469

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
FIRST LINE	045 049 094 102 107 134 139 152 191 195 209 210 226 379 411 413 457 470
FISHER	018 041 050 065 069 102 104 107 139 156 172 209 320 324 379 408 414 421 470
FLINT	049 102 123 152 380
FNR	045
FORMENTI	049 090 107 113 139 307 324 379 407 467 469 480 481
FORMENTI-PHOENIX	050 104 113 307
FORTRESS	190 324
FRABA	049 152 421
FRIAC	045 049 152 195
FRONTECH	066 076 139 195 307 379 413 466 470 477
FUJITSU	042 045 071 102 107 195 236 379
FUJITSU GENERAL	195 379
FUNAI	042 076 094
GALAXI	045 049 152
GALAXIS	045 049 152 163 421
GBC	104 107 139 168 195 226 480
GE	074 182 218 378
GEANT CASINO	107 425
GEC	049 102 104 107 120 152 171 172 307 379 470
GEC(UK)	046 050 102 107 150 162
GELOSO	062 104 107 139 168 171 195 226 307 413 469 481
GENERAL	064 074 182
GENERAL TECHNIC	195
GENEXXA	049 123 152 307 426 466
GOLDHAND	379
GOLDLINE	213
GRUNDIG	049 080 090 152 232 247 249 407 454 455
GOODMANS	018 042 049 076 102 134 139 141 152 182 193 195 218 225 226 232 379 428 450 456 464
GORENJE	421
GPM	123
GRADIENTE	049 152 170 177
GRAETZ	049 090 104 136 139 152 153 162 171 172 198 225 307 466 469 475
GRANADA	013 018 033 041 049 102 104 105 112 120 152 171 172 198 209 218 238 241 307 379 407 425 470 471 472 474
GRANADA(UK)	046 050 090 107 139 162 307
GRANDIN	049 107 113 123 152 195 378 380 425 435
GRONIC	045 379

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
HALIFAX	076 379
HAMPTON	379
HANIMEX	094
HANSEATIC	018 049 050 094 104 107 113 152 172 195 241 324 378 379 391 421 455 467 470 475
HANTAREX	045 046 049 152 195
HANTOR	049 152
HARLEY DAVIDSON	042
HARWOOD	049 152 195 426
HAUPPAUGE	049 152
HAVERMY	190
HCM	049 076 123 152 163 195 378 379 426
HEMA	195 379
HEMMERMANN	150 470
HIFIVOX	074 182 186 424 453 463
HIGASHI	050
HIGHLINE	049 076 152
HIKONA	123
HINARI	012 018 042 049 066 094 107 123 134 139 195 209 232 307
HISAWA	123 378 380 425
HIT	324
HITACHI	018 020 033 049 050 074 086 099 102 104 107 110 126 127 139 150 152 162 168 171 182 186 218 238 307 379 466 469 470 472 479
HITACHI FUJIAN	013
HITSU	123 195 380
HORNYPHON	049 112 152
HOSHAI	123 380
HUANYU	193 226 379
HYGASHI	379
HYPER	050 168 195 379 413
HYPERSONIC	172
HYPSON	049 076 152 217 378 379 380 425
IBERIA	049 152
ICE	049 076 123 152 195 225 379
ICES	123 379
IMPERIAL	011 049 090 093 094 107 142 152 163 168 307 346 348 369 407 413 421 470 480
INDIANA	049 152
INGELEN	090 104 136 139 153 162 171 198 232 435 466
INGERSOLL	195
INNO HIT	046 049 050 066 102 123 152 195 217 379 407 413
INNOVATION	049 152
INTERACTIVE	210
INTERBUY	076 195 413

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
INTERFUNK	049 065 067 074 090 104 107 112 139 150 152 153 172 182 307 324 413 421 453 463 466 475
INTERNAL	049 152
INTERVISION	045 049 055 076 107 123 152 225 232 378 379 380 413 421
IR	346
IRRADIO	049 066 090 123 152 195 407 413
ISUKAI	049 123 152 378
ITC	379 480
ITS	049 076 123 152 225 378 379
ITT	042 090 107 134 139 150 157 162 171 172 193 197 198 209 307 375 428 466 469 470 471 475 479
ITT-NOKIA	042 090 104 107 134 136 139 150 153 162 171 172 193 197 198 209 307 375 470 428 433 435 437
ITV	076 049 152 413
JEAN	018
JEC	141
JET POINT	365
JVC	018 103 123 170 182 225 409 433 439 465
KAISUI	049 050 123 152 195 378 379 380
KAMOSONIC	050
KAMP	379
KAPSCH	071 107 172 236 466
KARCHER	020 045 049 050 068 076 107 152 195 217 378 421 435
KATHREIN	455
KAWASHO	379
KB ARISTOCRAT	107
KENDO	045 049 055 134 152 172 210 413 421 435 476
KENNEDY	071 079 104 107 139 236 369 480
KINGSLEY	379
KLARMAX	371
KNEISSEL	049 152 210 243 369 391 411 421 435
KOLSTER	045 049 152 470
KNOKA	049 123 152 225
KONTAKT	232
KORPEL	049 152
KORTING	065 094 113 324 4213
KOSMOS	049 152
KOTRON	076 426
KOYODA	195
KRAKING	411
KRIESLER	050 065 079 112 152 160
KTV	050 379
KURO	445
KYOSHU	076 163 426
KYOTO	107
LECSON	049 152

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
LEMAIR	210
LENCO	049 107 152 195 226
LENOIR	050 195
LESA	413
LEYCO	049 076 094 102 152
LG(GOLDSTAR)	049 050 055 107 139 152 168 172 182 195 219 379 413 414 421 460
LIFESENK & TTER	049 112 152 345
LIFE	440 441 443 444
LIFETEC	049 076 123 152 195 226 440 441 443 444
LLOYD S	195
LOEWE	035 049 089 120 152 324 391 421
LOEWE OPTA	035 046 049 065 120 144 152 213 324
LOGIK	131 225
LOGIX	195
LUMA	071 107 110 152 171 172 195 210 226 236 307
LUMATRON	049 076 107 152 172 236 379
LUX MAY	049 152 195
LUXOR	042 050 090 107 127 139 150 172 197 209 307 375 428 429 470 472 473 475
LYCO	076
MAAZ	371
MADISON	049 152
MAGNADYNE	045 046 062 065 104 107 120 139 150 168 324 413 469
MAGNAFON	045 046 050 068 090 120 379 407 481
MAGNAVOX	018 042 049 152
MAGNUM	440 441 443 444
MANDOR	076
MANESTH	076 094 113 134 141 152 379 467
MANHATTAN	049 195
MARANTZ	049 152 455
MARELLI	324
MARK	049 152 195 226 379
MASUDA	123 195 225
MATSUI	012 018 041 049 050 094 100 102 106 107 131 134 141 150 152 171 195 209 218 225 232 247 307 379 380 470
MAXIMAL	139
MAXWELL	371
MEDIATOR	049 112 152
MEDION	049 152 195 217 457
MEGAS	435
MEGATRON	126
MELECTRONIC	020 049 074 152 182 193 195 197 210 226 375 379 408 413 428 429 466 470
MELVOX	425

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
MEMOREX	099 195 217
MEMPHIS	102 125 195 213
MERCURY	049 152 195
METZ	049 065 067 070 092 247 324 412 420 454 481
MICROMAXX	049 152 195
MICROSTAR	440 441 443 444
MINERVA	080 090 232 247 249 407 454
MINOKA	049 152 426 470
MITSUBISHI	013 018 049 065 105 131 152 157 190 247 324 454
MIVAR	046 050 058 072 081 090 120 379 391 407 414 421 434
MONACO	195
MORGAN S	049 152
MOTION	407
MOTOROLA	190
MTC	152 379 421 470
MTEC	106
MULTISTANDARD	045
MULTITEC	049 152 195
MULTITECH	045 046 049 050 120 152 195 379 407 413 421 470
MURPHY	102 104 105 107 171 307 379
MURPHY(UK)	162
MUSIKLAND	123
MYRYAD	455
NAD	172 209 475
NAIKO	049 152
NAKIMURA	049 152 226
NAONIS	040 071 079 110 171
NAT	085 151
NATIONAL	033 085 104
NEC	018 049 113 131 152 177 195 226 379 380
NECKERMANN	011 049 050 065 107 139 152 163 210 247 249 307 324 357 379 413 421 455 470 481
NEDIATOR	152
NEI	049 125 152 225 477
NESCO	042 413
NETSAT	049 152
NETWORK	213
NEUFUNK	049 152 195 435
NEW TECH	049 050 152 182 195 379
NEW WORLD	123
NICAMAGIC	379
NIKKAI	018 049 076 102 123 125 139 141 152 195 213 379 066
NOBLEX	049 076 152
NOBLIKO	045 050 080 090 379 407
NOGAMATIC	074 182 186 424 453 463

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
NOKIA	090 104 107 134 136 139 150 153 157 162 171 172 193 197 198 209 226 307 375 428 429 433 437 465 470 475 478 479
NORDMENDE	049 074 083 150 152 182 186 218 247 307 424 453 463 469 481
NOVATRONIC	020 049 152 226
OCEANIC	086 094 104 107 108 109 139 172 209 425 466 469 475
OCEANIC(F)	150
ODEON	076
OKANO	049 076 102 152 421
OMEGA	076
ONCEAS	050
ONWA	123 225
OPERA	049 152
OPTIMUS	099
OPTONICA	190
ORBIT	049 152
ORION	012 042 045 049 076 094 113 131 134 139 150 152 191 195 216 366 367 426 467
ORLINE	049 123 152
ORMENTI-PHOENIX	104
ORMOND	195
OSAKA	066
OSAKI	049 066 076 102 106 123 152 226 379 426
OSIO	049 152
OSO	123
OSUME	018 102 123
OTAKE	450
OTTO VERSAND	018 049 050 074 094 104 107 113 134 139 152 172 190 218 247 249 357 362 379 413 414 454 455 467 469 470 480 481
P.T ACTRON	217
PAEL	050 379
PALLADIUM	049 107 152 163 210 247 324 357 379 413 421 470
PALSONIC	049 055 076 152 379 426
PANAMA	049 076 152 195 379 413
PANASONIC	016 049 099 104 107 139 151 152 172 396 420 466 469 481
PANAVISION	049 152 210
PATHE CINEMA	107 113 379 391 411 425 467 470 480 481
PATHE CINEMA(F)	050 168
PATHE MARCONI	014 074 182 186 424 453 462 463
PAUSA	195
PAUZA	195
PERDIO	049 102 107 113 152 467
PERFEKT	049 152

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
PERSHIN	425
PHILCO	011 016 049 065 090 093 094 104 107 126 142 152 163 168 324 346 348 369 407 413 421 480 481
PHILEX	471
PHILHARMONIC	379
PHILIPS	014 049 050 065 079 089 112 152 160 182 193 216 217 220 226 247 249 324 427 455 482
PHOENIX	049 050 102 104 107 113 152 324 379 421
PHONOLA	049 050 065 079 112 152 160 324 379
PILOT	049 152
PIONEER	049 074 152 172 182 209 218 307 421 427 466
PLANTRON	049 076 152 195
PLAYSONIC	379
POLICOM	074
POPPY	195
PORTLAND	226
POWERPOINT	232
PRANDONI-PRINCE	046 090 120 171 172 307 407 413
PRECISION	379
PREMIER	142
PRIMA	076 195 307
PRINCE	046 171
PRINZ	102 470
PROFEX	107 139 195 407 475
PROFI-TRONIC	045 049 152
PROLINE	049 102 112 191 366 436
PROSONIC	049 085 151 152 195 225 226 379 421
PROTECH	045 049 076 125 139 152 163 195 379 413 457 470 477 480
PROVISION	049 152
PYE	050 065 079 112 152 160 226 324
PYMI	049 112 152 195 226 324
QUADRA VISION	425
QUASAR	045 046 068 099 413
QUELLE	018 020 049 050 074 076 078 080 090 091 094 113 131 139 146 150 152 153 172 195 247 249 320 345 346 348 357 379 408 413 449 451 454 470 475 480 481
QUESTA	018
RADIALVA	049 074 107 123 152
RADIOLA	014 049 050 065 079 112 152 160
RADIOMARELLI	045 046 062 065 104 105 150 152 168 324 413
RADIONETE	020 150
RADIOSHACK	049 152
RADIOTONE	049 076 152 163 195 421 426

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
RANK ARENA	018
RCA	190 218 436
RECOR	049 152
RECTILIGNE	049 152
REDIFFUSION	018 059 104 105 139 171 172 307 471 475
REDIFFUSION(UK)	150 162
REDSTAR	049 152
REFLEX	049 152
REOC	460
REVOX	049 152 421
REX	040 071 079 107 110 152 171 210 236 243 307 413 466
RFT	076 102 241 324 391 421
RHAPSODY	379
R-LINE	049 152
ROADSTAR	049 076 123 152 163 195
ROBOTRON	065 324
RODEX	049 152
ROWA	458
ROWSONIC	050
ROYAL LUX	421 426
RTF	065
SABA	046 065 074 077 107 120 139 172 182 186 218 307 324 424 436 452 453 463 466 469 481
SACCS	411
SAGEM	378 380 435
SAISHO	012 050 076 107 131 134 195 307 379 477
SALORA	033 107 127 136 139 150 153 171 172 198 209 307 466 470 472 474 475 479
SAMBERS	045 046 068 090 120 407 481
SANDRA	379
SANELA	411
SANSUI	049 152 225
SANTON	195
SANYO	018 020 041 049 050 065 102 107 131 152 195 198 209 320 379 391 408 421 481
SAVE	049 152
SBR	049 112 152
SCHAUB LORENZ	090 104 139 139 1543 162 171 198 307 433 469 470 475
SCHNEIDER	014 040 049 050 065 069 079 104 107 112 123 139 152 156 160 168 172 182 195 225 243 307 379 382 413 414 417 457 468 470
SCOTT	042
SEARS	042
SEG	018 045 049 050 076 107 152 172 195 232 379 413 407 457 480

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
SEI	012 045 049 094 107 139 152 236 324 357 469 470 481
SEI SINUDYNE	446
SELECO	040 071 079 107 110 152 171 172 210 236 243 307 369 466 476
SENCORA	195
SENTRA	123 139 141 195
SERINO	380 435
SHARP	018 094 170 190 320 362
SHORAI	042 094
SIAM	049 152
SIAREM	045 046 065 104 107 120 139 324 469 481
SIEMENS	018 049 066 113 152 247 249 307 320 345 451 454 469 481
SIERA	050 065 079 112 152 160
SIERRA	049 112 152
SIESTA	421
SILVA	049 152 379
SILVER	018 042 049 076 152 172
SINGER	045 049 065 104 152 195 324 369 413 425
SINUDYNE	012 045 065 094 104 107 134 139 150 152 172 210 216 236 324 357 366 367 469 470 481
SKANTIC	307 472 473
SKY	049 152
SKYWORTH	448
SOGERA	113
SOLAVOX	066 102 107 139 172 307 466 471
SONAWA	123
SONITRON	209 379 421
SONNECLAIR	049 152
SONOKO	049 050 076 152 195 378 379
SONOLOR	107 139 172 209 357 425 466
SONTEC	049 094 152 421
SONY	018 045 131 211 346 357 358 370
SOUND & VISION	045 123 226
SOUND WAVE	049 113 163
SOUNDESIGN	042
SPECTRA	195
SSANGYONG	195
STANDARD	049 050 113 123 152 195 226 379
STARLIGHT	049 076 107 152 195
STENWAY	123 378
STERN	040 071 079 107 110 152 171 236 243 307 466
STRATO	049 076 152 195
SUNKAI	049 094 123 134 152 191 232 367 380
SUNSTAR	049 152 195 225
SUNWOOD	049 152 195

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
SUPERLA	379
SUPERTECH	049 123 152 195 379
SUPRA	195 226
SUSUMU	123 218
SUTRON	195
SWISSLINE	413
SYDNEY	379
SYSLINE	044
SYTONG	379
TACTUS	106
TANDBERG	065 074 078 172 182 210 213 420 449
TANDY	050 102 123 190 307 379 413 466
TASHIKO	018 050 107 177 379 470 474
TATUNG	049 050 102 106 120 131 152 217 379
TCM	440 441 443 444
TEAC	049 076 152 163 195 217 378 380 426 457 458 470
TEC	040 050 064 168 195 213 218 243 379 413 480
TECH LINE	049 152 195
TECHICA	123
TECHNEMA	113 467
TECHNICS	099
TECHNOLACE	042
TEDELEX	379
TEIRON	195
TEKNIKA	042
TELEAVIA	014 074 182 186 218 424 453 462 463
TELECOR	049 107 123 152 379
TELEFUNKEN	049 064 074 082 152 182 186 187 218 230 346 348 424 436 452 453 463
TELEFUSION	049 152
TELEGAZI	049 076 107 123 152
TELEMEISTER	049 113 152 467
TELESONIC	049 152
TELESTAR	049 152
TELETECH	049 152 195 213 413
TELETON	018 067 071 107 236 379 470
TELEVIDEON	050 104 107 113 379
TELEVISO	425
TEMCO	094
TEMPEST	049 152 195
TENNESSEE	049 152
TENSAI	020 050 055 094 113 123 152 195 225 226 379 413 450 467
TESMET	439
TETUNG	046
TEVION	049 152 195

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
TEXET	050 123 195 226 379
THOMSON	014 024 049 064 074 134 152 182 186 218 230 424 436 453 462 463 470
THORN	049 102 103 106 141 152 218 226 346 348 408 409 411 454 464 470 475
THORN-FERGUSON	074 076 080 082 103 218 357 358 375
TOWADA	045 379 470 480
TOYODA	195
TOKAI	049 102 107 152 195 213 226 379
TOKYO	141 379
TOMASHI	123 378
TOSHIBA	018 045 128 141 369 379
TRAKTON	076
TRANS CONTINENS	046 049 152 171 307 379
TRANSONIC	049 152 380 458
TRANSTEC	379
TRIDENT	379
TRISTAR	123
TRIUMPH	012 046 049 128 152 197 375
UHER	049 069 071 080 090 113 152 163 226 236 307 407 414 421 467
ULTRA	409
ULTRAVOX	045 049 050 065 104 107 139 152 226 324 379 413 471
UNIC LINE	049 152
UNITED	049 152
UNIVERSUM	011 012 018 020 049 074 076 094 107 131 152 163 172 195 197 210 213 247 320 345 346 357 375 379 407 408 413 421 428 429 437 454 470 480
UNIVOX	049 107 152 213 324 411
UTAX	050
VEGAVOX	163
VESTEL	049 107 125 152 379
VEXA	152 195
VICTOR	170
VIDEO SYSTEM	049 152
VIDEOLOGIQUE	123 379
VIDEOSAT	413 447
VIDEOSYSTEM	049 152
VIDEOTECHNIC	113 226 379
VIDEOTON	107 472
VIDIKRON	045
VIDTECH	018
VIPER	213
VISIOLA	379
VISION	049 113 152 467

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
VISOREX	442
VISTAR	172 236
VOLTEC	074
VORTEC	152
VOXSON	049 065 090 152 163 171 307 324 407 466
WALTHAM	049 152 163 182 307 379 472
WATSON	049 107 113 123 152 195 247 467
WATT RADIO	045 050 068 104 107 139 150 379 470 480
WEGA	018 049 139 152 324
WEGA COLOR	065 088
WEGAVOX	195
WELTBLICK	113 152
WESTINGHOUSE	094 152
WESTON	168
WHARFEDALE	049 152
WHITE	045
WHITE WESTINGHOUSE	049 050 113 152 213 379 467
WINCO	426
WINDSTAR	378
XRYPTON	049 152
YAMISHI	049 123 152 378 379 380
YOKAN	049 152
YOKO	049 050 076 123 152 195 379 413 421 477
YORX	123
ZANUSSI	040 071 079 110 152 171 236 307 379
ZOPPAS	040 071 079 110 171 307

Note: In order to control this product with your existing Samsung TV Remote control, you must input Code 014 into the TV Remote control to make it work.

TROUBLESHOOTINGS

In some region, the digital terrestrial signal may be weak.
So you'd better use the antenna in which the booster was built, for watching the weak signal channels.
You can download and upgrade the system software of the receiver through a specific channel through a specific channel designated by the broadcaster. The Distributor will provide you with more information about that.

Problem	Possible cause	Solution of the problem
No display LED on the front panel; No power supply	Power cord not plugged in correctly	Power cord plug in correctly
No pictures on the screen	Receiver in Standby mode; SCART/HDMI not connected tightly to video output of TV; incorrect channel or video output selected on TV	Set receiver to "On"; Check connection; Check channel and video output (TV instruction manual)
No sound	SCART/HDMI connected incorrectly; Volume level = 0; Muting active	Check connection; Increase Volume on TV set; Press the MUTE key
Remote Control does not operate directly	Incorrect operation; Batteries dead or inserted incorrectly	Point remote control towards the Receiver. Replace batteries or insert correctly
Poor picture quality signal strength in	Signal strength too low	Check all wire connections.
On-Screen Error Messages: "Signal is weak"	Antenna cable not connected or not tight; incorrect position of the antenna	Check connection and correct; Check position and correct antenna; Check the signal strength in the "Installation" menu
On-Screen Error Message: "No Channels"	Receiver not yet set	Scanning of in "Installation" menu

DISPOSAL

The device, packaging material (e.g. Styrofoam) and the batteries must never be disposed of with household refuse. Please obtain appropriate information about the regulations in your community, and dispose of all refuse in accordance with regulations at the separate locations provided.

TECHNICAL SPECIFICATIONS

Terrestrial Tuner/Demodulator	Input frequency	VHF, UHF Band
	Standard	DVB-T (ETS 300 744)
	Channel Bandwidth	7 / 8MHz (Switchable)
	COFDM System	2K, 8K carrier Hierarchical supported
	Demodulation type	QPSK, 16QAM, 64QAM
	Guard Interval	1/32, 1/16, 1/8, 1/4 active symbol duration
	FEC	1/2, 2/3, 3/4, 5/6, 7/8
	Power for outdoor active antenna	5V@35mA with overload protection through Coaxial cable
Video Decoder	Video Standards	MPEG-1 ISO/IEC 11172-2 MPEG-2 MP@ML ISO/IEC 13818-2 H.264 / AVC
	Field / Frame rate	50 / 25 Hz
	Resolution	576i / 576p / 720p / 1080i
	Aspect ratio	4:3, 16:9 & Letter Box
	Video Input / Output	TV SCART with R/G/B, CVBS OUT HDMI v1.3 digital video output w/ HDCP
Audio Decoder	Audio Standards	MPEG-1 layer I & layer II , AAC+, DD+
	Sampling Rate	32, 44.1, 48 KHz
	Audio input / output	TV SCART for AL/AR OUT HDMI OUT One Electrical I/F for digital audio SPDIF OUT(Optical)
Connectivity	PSTN Modem Ethernet USB	V.90 / 92 10/100 Base Host 2.0, 5V@800mA max.
Software Upgrade	DVB-SSU compliant	Over the Air
Rear panel interface	RF input connector	IEC type, Female
	Loop through Output connector	IEC type, Male
	CVBS, R/G/B video OUT AL/AR stereo audio OUT	TV SCART
	Digital Video Output	HDMI
	SPDIF digital audio OUT	TosLink
	Modem	RJ-11
	Ethernet	RJ-45
	Power Jack	Detachable
	Power switch	

Front Panel	5 Keypads, 1 LED indicator for PWR 7-segment display IR Sensor Dual smart card slot	PWR, CH up/down, VOLUME +/- One Power ON (RED)
External Power Adaptor	Mains input voltage	200-240V AC ~
	Mains input frequency	50/60 Hz
	DC output to STB	12V@2A
	Power consumption	Normal operation: 11.3W Max.: 24W
Operation Temperature	Funzionamento a Temperature	0 ~ 40 degree C
Accessory	Remote Controller & Batteries	Adaptor
	User's manual	

Note : The specification of the STB may be changed without notice in advance.

Correct disposal of batteries in this product
(Applicable in the European Union and other European countries with separate battery return systems.)

This marking on the battery, manual or packaging indicates that the batteries in this product should not be disposed of with other household waste at the end of their working life. Where marked, the chemical symbols Hg, Cd or Pb indicate that the battery contains mercury, cadmium or lead above the reference levels in EC Directive 2006/66. If batteries are not properly disposed of, these substances can cause harm to human health or the environment. To protect natural resources and to promote material reuse, please separate batteries from other types of waste and recycle them through your local, free battery return system.

Correct Disposal of This Product (Waste Electrical & Electronic Equipment)
(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.
Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

Open Source Announcement

Some software components of this product incorporate source code covered under under the GNU General Public License (GPL), the GNU Lesser General Public License (LGPL) and BSD License.

Acknowledgement:
This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.openssl.org/)

The software included in this product contains copyrighted software that is licensed under the GPL/LGPL. You may obtain the complete Corresponding Source code from us for a period of three years after our last shipment of this product by sending email to: nwswmanager@samsung.com

If you want to obtain the complete Corresponding Source code in the physical medium such as CD-ROM, the cost of physically performing source distribution may be charged.
You may also find a copy of the source at http://www.samsungnetwork.com/Home/Opensource

This offer is valid to anyone in receipt of this information.

Below is the list of components covered under the GNU General Public License (GPL), the GNU Lesser General Public License (LGPL) and BSD License.

Component	License	Component	License
busybox	GPL 2.0	dhcpcd	GPL 2.0
hotplug	GPL 2.0	ifconfig	GPL 2.0
bash	GPL 2.0	kill, ps	GPL 2.0
uClibc	LGPL 2.1	Linux kernel	GPL 2.0
portmap	BSD License	zlib	zlib license
giflib	MIT License	libpng	libpng license
lipjpeg	jpeg license	freetype	freetype license
apache mirae	Apache license 2.0	OpenSSL	OpenSSL licnese
dlmalloc	Public Domain	jarkarta regexp	Apache license 2.0

GNU GENERAL PUBLIC LICENSE
Version 2, June 1991
Copyright (C) 1989, 1991 Free Software Foundation, Inc.
51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble
The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute

copies of the software, or if you modify it. For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps:
(1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software. Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software.

If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents.
We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0) This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The “Program”, below, refers to any such program or work, and a “work based on the Program” means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term “modification”.) Each licensee is addressed as “you”.
Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1) You may copy and distribute verbatim copies of the Program’s source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program. You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2) You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:
   a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
   b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
   c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

   These requirements apply to the modified work as a whole.
   If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.
   Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.
   In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3) You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:
   a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
   b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
   c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

   The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.
   If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4) You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5) You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6) Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients’ exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7) If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License.
   If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.
   If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other

circumstances.
It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.
This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8) If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.
9) The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.
Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and “any later version”, you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation.
If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.
10) If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11) BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM “AS IS” WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.
12) IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the “copyright” line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>
Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or(at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) year name of author Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type ‘show w’.
This is free software, and you are welcome to redistribute it under certain conditions; type ‘show c’ for details.

The hypothetical commands ‘show w’ and ‘show c’ should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than ‘show w’ and ‘show c’; they could even be mouse-clicks or menu items--whatever suits your program.
You should also get your employer (if you work as a programmer) or your school, if any, to sign a “copyright disclaimer” for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program ‘Gnomovision’ (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs.
If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License

GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999
Copyright (C) 1991, 1999 Free Software Foundation, Inc.
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA
Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.
This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public

License is the better strategy to use in any particular case, based on the explanations below.
When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.
To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.
For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code.
If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.
To protect each distributor, we want to make it very clear that there is no warranty for the free library.
Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.
Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.
Most GNU software, including some libraries, is covered by the ordinary GNU General Public License.
This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.
When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.
We call this license the “Lesser” General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.
For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.
In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users’ freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.
The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a “work based on the library” and a “work that uses the library”. The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0) This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called “this License”). Each licensee is addressed as “you”.
A “library” means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.
The “Library”, below, refers to any such software library or work which has been distributed under these terms. A “work based on the Library” means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term “modification”.)
“Source code” for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.
Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1) You may copy and distribute verbatim copies of the Library’s complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.
You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.
2) You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:
   a) The modified work must itself be a software library.
   b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
   c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
   d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful. (For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.) These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it. Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library. In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.
3) You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices. Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.
This option is useful when you wish to copy part of the code of the Library into a program that is not a

library.

4) You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.
   If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.
5) A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a “work that uses the Library”. Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.
   However, linking a “work that uses the Library” with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a “work that uses the library”. The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.
   When a “work that uses the Library” uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.
   If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)
   Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.
6) As an exception to the Sections above, you may also combine or link a “work that uses the Library” with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer’s own use and reverse engineering for debugging such modifications.
   You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:
   a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable “work that uses the Library”, as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)
   b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user’s computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.
   c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.
   d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
   e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy. For an executable, the required form of the “work that uses the Library” must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.
   It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.
7) You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:
   a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.
   b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.
8) You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.
9) You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.
10) Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients’ exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.
11) If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library. If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.
    It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice. This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.
12) If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.
13) The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.
    Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and “any later version”, you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the

Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14) If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

15) BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY “AS IS” WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16) IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).
To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the “copyright” line and a pointer to where the full notice is found.

one line to give the library’s name and an idea of what it does.
Copyright (C) year name of author

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

Also add information on how to contact you by electronic and paper mail.
You should also get your employer (if you work as a programmer) or your school, if any, to sign a “copyright disclaimer” for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library ‘Frob’ (a library for tweaking knobs) written by James Random Hacker.

Signature of Ty Coon, 1 April 1990 Ty Coon, President of Vice

That’s all there is to it!

BSD License

Copyright (c) 1990 The Regents of the University of California.
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement:
This product includes software developed by the University of California, Berkeley and its contributors.
4. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

The zlib/libpng License

Copyright (C) 1995-1998 Jean-loup Gailly and Mark Adler

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

The MIT License

The GIFLIB distribution is Copyright (c) 1997 Eric S. Raymond

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Libpng License
This copy of the libpng notices is provided for your convenience. In case of any discrepancy between this copy and the notices in the file png.h that is included in the libpng distribution, the latter shall prevail.

COPYRIGHT NOTICE, DISCLAIMER, and LICENSE:

If you modify libpng you may insert additional notices immediately following this sentence.
libpng versions 1.0.7, July 1, 2000, through 1.0.13, April 15, 2002, are Copyright (c) 2000-2002 Glenn Randers-Pehrson and are distributed according to the same disclaimer and license as libpng-1.0.6 with the following individuals added to the list of Contributing Authors

Simon-Pierre Cadieux
Eric S. Raymond
Gilles Vollant

and with the following additions to the disclaimer:

There is no warranty against interference with your enjoyment of the library or against infringement. There is no warranty that our efforts or the library will fulfill any of your particular purposes or needs. This library is provided with all faults, and the entire risk of satisfactory quality, performance, accuracy, and effort is with the user.

libpng versions 0.97, January 1998, through 1.0.6, March 20, 2000, are Copyright (c) 1998, 1999 Glenn Randers-Pehrson, and are distributed according to the same disclaimer and license as libpng-0.96, with the following individuals added to the list of Contributing Authors:

Tom Lane
Glenn Randers-Pehrson
Willem van Schaik

libpng versions 0.89, June 1996, through 0.96, May 1997, are Copyright (c) 1996, 1997 Andreas Dilger
Distributed according to the same disclaimer and license as libpng-0.88, with the following individuals added to the list of Contributing Authors:

John Bowler
Kevin Bracey
Sam Bushell
Magnus Holmgren
Greg Roelofs
Tom Tanner

libpng versions 0.5, May 1995, through 0.88, January 1996, are Copyright (c) 1995, 1996 Guy Eric Schalnat, Group 42, Inc.
For the purposes of this copyright and license, "Contributing Authors" is defined as the following set of individuals:

Andreas Dilger
Dave Martindale
Guy Eric Schalnat
Paul Schmidt
Tim Wegner

The PNG Reference Library is supplied "AS IS". The Contributing Authors and Group 42, Inc. disclaim all warranties, expressed or implied, including, without limitation, the warranties of merchantability and of fitness for any purpose. The Contributing Authors and Group 42, Inc. assume no liability for direct, indirect, incidental, special, exemplary, or consequential damages, which may result from the use of the PNG Reference Library, even if advised of the possibility of such damage.

Permission is hereby granted to use, copy, modify, and distribute this source code, or portions hereof, for any purpose, without fee, subject to the following restrictions:

1. The origin of this source code must not be misrepresented.

2. Altered versions must be plainly marked as such and must not be misrepresented as being the original source.

3. This Copyright notice may not be removed or altered from any source or altered source distribution.
The Contributing Authors and Group 42, Inc. specifically permit, without fee, and encourage the use of this source code as a component to supporting the PNG file format in commercial products. If you use this source code in a product, acknowledgment is not required but would be appreciated.

A "png_get_copyright" function is available, for convenient use in "about" boxes and the like:

printf("%s",png_get_copyright(NULL));

Also, the PNG logo (in PNG format, of course) is supplied in the files "pngbar.png" and "pngbar.jpg (88x31) and "pngnow.png" (98x31).

Libpng is OSI Certified Open Source Software. OSI Certified Open Source is a certification mark of the Open Source Initiative.

Glenn Randers-Pehrson
randeg@alum.rpi.edu
April 15, 2002

The Independent JPEG Group's JPEG software
README for release 6b of 27-Mar-1998
==========
This distribution contains the sixth public release of the Independent JPEG Group's free JPEG software.
You are welcome to redistribute this software and to use it for any purpose, subject to the conditions under LEGAL ISSUES, below.

Serious users of this software (particularly those incorporating it into larger programs) should contact IJG at jpeg-info@uunet.uu.net to be added to our electronic mailing list. Mailing list members are notified of updates and have a chance to participate in technical discussions, etc.

This software is the work of Tom Lane, Philip Gladstone, Jim Boucher, Lee Crocker, Julian Minguillon, Luis Ortiz, George Phillips, Davide Rossi, Guido Vollbeding, Ge' Weijers, and other members of the Independent JPEG Group.

IJG is not affiliated with the official ISO JPEG standards committee.

LEGAL ISSUES
==========

In plain English:
We don't promise that this software works. (But if you find any bugs, please let us know!)
You can use this software for whatever you want. You don't have to pay us.
You may not pretend that you wrote this software. If you use it in a program, you must acknowledge somewhere in your documentation that you've used the IJG code.

In legalese:
The authors make NO WARRANTY or representation, either express or implied, with respect to this software, its quality, accuracy, merchantability, or fitness for a particular purpose. This software is provided "AS IS", and you, its user, assume the entire risk as to its quality and accuracy.

This software is copyright (C) 1991-1998, Thomas G. Lane. All Rights Reserved except as specified below.

Permission is hereby granted to use, copy, modify, and distribute this software (or portions thereof) for any purpose, without fee, subject to these conditions:
(1) If any part of the source code for this software is distributed, then this README file must be included, with this copyright and no-warranty notice unaltered; and any additions, deletions, or changes to the original files must be clearly indicated in accompanying documentation.
(2) If only executable code is distributed, then the accompanying documentation must state that "this software is based in part on the work of the Independent JPEG Group".
(3) Permission for use of this software is granted only if the user accepts full responsibility for any undesirable consequences; the authors accept NO LIABILITY for damages of any kind.

These conditions apply to any software derived from or based on the IJG code, not just to the unmodified library. If you use our work, you ought to acknowledge us.

Permission is NOT granted for the use of any IJG author's name or company name in advertising or publicity relating to this software or products derived from it. This software may be referred to only as "the Independent JPEG Group's software".

We specifically permit and encourage the use of this software as the basis of commercial products, provided that all warranty or liability claims are assumed by the product vendor.

ansi2knr.c is included in this distribution by permission of L. Peter Deutsch, sole proprietor of its copyright holder, Aladdin Enterprises of Menlo Park, CA. ansi2knr.c is NOT covered by the above copyright and conditions, but instead by the usual distribution terms of the Free Software Foundation; principally, that you must include source code if you redistribute it. (See the file ansi2knr.c for full details.) However, since ansi2knr.c is not needed as part of any program generated from the IJG code, this does not limit you more than the foregoing paragraphs do.

The Unix configuration script "configure" was produced with GNU Autoconf. It is copyright by the Free Software Foundation but is freely distributable. The same holds for its supporting scripts (config.guess, config.sub, ltconfig, ltmain.sh). Another support script, install-sh, is copyright by M.I.T. but is also freely distributable.

It appears that the arithmetic coding option of the JPEG spec is covered by patents owned by IBM, AT&T, and Mitsubishi. Hence arithmetic coding cannot legally be used without obtaining one or more licenses. For this reason, support for arithmetic coding has been removed from the free JPEG software. (Since arithmetic coding provides only a marginal gain over the unpatented Huffman mode, it is unlikely that very many implementations will support it.) So far as we are aware, there are no patent restrictions on the remaining code.

The IJG distribution formerly included code to read and write GIF files. To avoid entanglement with the Unisys LZW patent, GIF reading support has been removed altogether, and the GIF writer has been simplified to produce "uncompressed GIFs". This technique does not use the LZW algorithm; the resulting GIF files are larger than usual, but are readable by all standard GIF decoders.

We are required to state that

"The Graphics Interchange Format(c) is the Copyright property of CompuServe Incorporated. GIF(sm) is a Service Mark property of CompuServe Incorporated."

The FreeType Project LICENSE

2002-Apr-11
Copyright 1996-2002 by
David Turner, Robert Wilhelm, and Werner Lemberg
Introduction
==========

The FreeType Project is distributed in several archive packages; some of them may contain, in addition to the FreeType font engine, various tools and contributions which rely on, or relate to, the FreeType Project.
This license applies to all files found in such packages, and which do not fall under their own explicit license. The license affects thus the FreeType font engine, the test programs, documentation and makefiles, at the very least.
This license was inspired by the BSD, Artistic, and IJG (Independent JPEG Group) licenses, which all encourage inclusion and use of free software in commercial and freeware products alike. As a consequence, its main points are that:

- We don't promise that this software works. However, we will be interested in any kind of bug reports. (`as is' distribution)
- You can use this software for whatever you want, in parts or full form, without having to pay us. (`royalty-free' usage)
- You may not pretend that you wrote this software. If you use it, or only parts of it, in a program, you must acknowledge somewhere in your documentation that you have used the FreeType code. (`credits')

We specifically permit and encourage the inclusion of this software, with or without modifications, in commercial products. We disclaim all warranties covering The FreeType Project and assume no liability related to The FreeType Project.
Finally, many people asked us for a preferred form for a credit/disclaimer to use in compliance with this license. We thus encourage you to use the following text:
"Portions of this software are copyright © 1996-2002 The FreeType Project (www.freetype.org). All rights reserved."
Legal Terms
==========
0. Definitions
Throughout this license, the terms `package', `FreeType Project', and `FreeType archive' refer to the set of files originally distributed by the authors (David Turner, Robert Wilhelm, and Werner Lemberg) as the `FreeType Project', be they named as alpha, beta or final release.
`You' refers to the licensee, or person using the project, where `using' is a generic term including compiling the project's source code as well as linking it to form a `program' or `executable'. This program is referred to as `a program using the FreeType engine'.
This license applies to all files distributed in the original FreeType Project, including all source code, binaries and documentation, unless otherwise stated in the file in its original, unmodified form as distributed in the original archive. If you are unsure whether or not a particular file is covered by this license, you must contact us to verify this.
The FreeType Project is copyright (C) 1996-2000 by David Turner, Robert Wilhelm, and Werner Lemberg. All rights reserved except as specified below.

1. No Warranty
THE FREETYPE PROJECT IS PROVIDED `AS IS' WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL ANY OF THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY DAMAGES CAUSED BY THE USE OR THE INABILITY TO USE, OF THE FREETYPE PROJECT.

2. Redistribution
This license grants a worldwide, royalty-free, perpetual and irrevocable right and license to use, execute, perform, compile, display, copy, create derivative works of, distribute and sublicense the FreeType Project

(in both source and object code forms) and derivative works thereof for any purpose; and to authorize others to exercise some or all of the rights granted herein, subject to the following conditions:

- Redistribution of source code must retain this license file (`FTL.TXT') unaltered; any additions, deletions or changes to the original files must be clearly indicated in accompanying documentation. The copyright notices of the unaltered, original files must be preserved in all copies of source files.
- Redistribution in binary form must provide a disclaimer that states that the software is based in part of the work of the FreeType Team, in the distribution documentation. We also encourage you to put an URL to the FreeType web page in your documentation, though this isn't mandatory.

These conditions apply to any software derived from or based on the FreeType Project, not just the unmodified files. If you use our work, you must acknowledge us. However, no fee need be paid to us.

3. Advertising
Neither the FreeType authors and contributors nor you shall use the name of the other for commercial, advertising, or promotional purposes without specific prior written permission.
We suggest, but do not require, that you use one or more of the following phrases to refer to this software in your documentation or advertising materials: `FreeType Project', `FreeType Engine', `FreeType library', or `FreeType Distribution'.
As you have not signed this license, you are not required to accept it. However, as the FreeType Project is copyrighted material, only this license, or another one contracted with the authors, grants you the right to use, distribute, and modify it. Therefore, by using, distributing, or modifying the FreeType Project, you indicate that you understand and accept all the terms of this license.

4. Contacts
There are two mailing lists related to FreeType:
- freetype@freetype.org
Discusses general use and applications of FreeType, as well as future and wanted additions to the library and distribution. If you are looking for support, start in this list if you haven't found anything to help you in the documentation.
- devel@freetype.org
Discusses bugs, as well as engine internals, design issues, specific licenses, porting, etc.
- http://www.freetype.org

Apache License
Version 2.0, January 2004
http://www.apache.org/licenses/

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity. "You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License. "Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

(a) You must give any other recipients of the Work or Derivative Works a copy of this License; and

(b) You must cause any modified files to carry prominent notices stating that You changed the files; and

(c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and

(d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the

following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and provide additional or different license terms and conditions use, reproduction, or distribution of Your modifications, or any such Derivative Works as a whole, provided Your use,roduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

http://www.apache.org/licenses/LICENSE-2.0

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

LICENSE ISSUES
==========
The OpenSSL toolkit stays under a dual license, i.e. both the conditions of the OpenSSL License and the original SSLeay license apply to the toolkit. See below for the actual license texts. Actually both licenses are BSD-style Open Source licenses. In case of any license issues related to OpenSSL please contact openssl-core@openssl.org.

OpenSSL License
Copyright (c) 1998-2004 The OpenSSL Project. All rights reserved.
Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:
1) Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2) Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3) All advertising materials mentioning features or use of this software must display the following acknowledgment:
“This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.openssl.org/)”
4) The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.
5) Products derived from this software may not be called "OpenSSL" nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project.
6) Redistributions of any form whatsoever must retain the following acknowledgment:
“This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/)”

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT “AS IS” AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

Original SSLeay License
Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com)
All rights reserved.

This package is an SSL implementation written by Eric Young (eay@cryptsoft.com).

The implementation was written so as to conform with Netscapes SSL.

This library is free for commercial and non-commercial use as long as the following conditions are adheared to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, lhash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft.com). Copyright remains Eric Young's, and as such any Copyright notices in the code are not to be removed. If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used.

This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package.
Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1) Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
2) Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3) All advertising materials mentioning features or use of this software must display the following acknowledgement:

"This product includes cryptographic software written by Eric Young(eay@cryptsoft.com)"
The word 'cryptographic' can be left out if the rouines from the library being used are not cryptographic related:-).

4) If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement: "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The license and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution license **[including the GNU Public Licence.]**